



USER MANUAL

Table of Contents

I) Technical Requirements (Hardware & Software).	3
II) Generic Image Management	4
A) Master Hard Disk Creator (MHDC)	4
B) PXE Booting the Computer	4
C) Image Creation	5
III) Driver management	7
A) How to add a Driver	7
IV) Application Management	10
A) How to add an application	10
B) How to modify an existing application:	14
C) Adding a Bundled Application	15
V) Hardware Testing Configuration	20
A) WinPE Testing Configuration:	20
B) Post-imaging Windows Extended Testing Configuration:	23
VI) SDS4MAR Flow	27
A) PXE Boot the computer to the Server.	27
B) Pre-imaging Selection Pages.	27
C) Deployment Flow	32
D) Disk Wiping	34
E) Windows Start-up and Post-Imaging Windows Extended Testing	37
VII) Buy & Renew Licenses	42

I) Technical Requirements (Hardware & Software).

In order to install SDS4MAR, minimum requirements are:

- A) Windows Server2008R2, 2012 (refer to Appendix for configuration)
- B) 4GB Memory
- C) 2 HDD: one for the system, one for the database
- D) Gigabit Network

II) Generic Image Management

A) Master Hard Disk Creator (MHDC)

Master Hard Disk Creator is a software that will be included in the SDS4MAR Package. It needs to be put onto a USB Flash Drive.

1. To create a generic image (with no user, no settings....) you must follow these steps for image preparation:
 - a. Install the Windows Operating System onto a computer known to be free of any hardware issues.
 - b. The computer needs to be in Audit Mode to capture the image. If the computer boots up to the Out of the Box Experience (OOBE Mode) then Press Ctrl + Shift + F3 keys (some keyboards require CTRL be pressed for the Function Keys as well) at the same time to go in Audit Mode.
 - c. Once in Audit mode launch the setup of MHDC to prepare your image. At the end of installation, click on OK. The PC will go through a cleanup and Sysprep with Generalize and then shutdown.

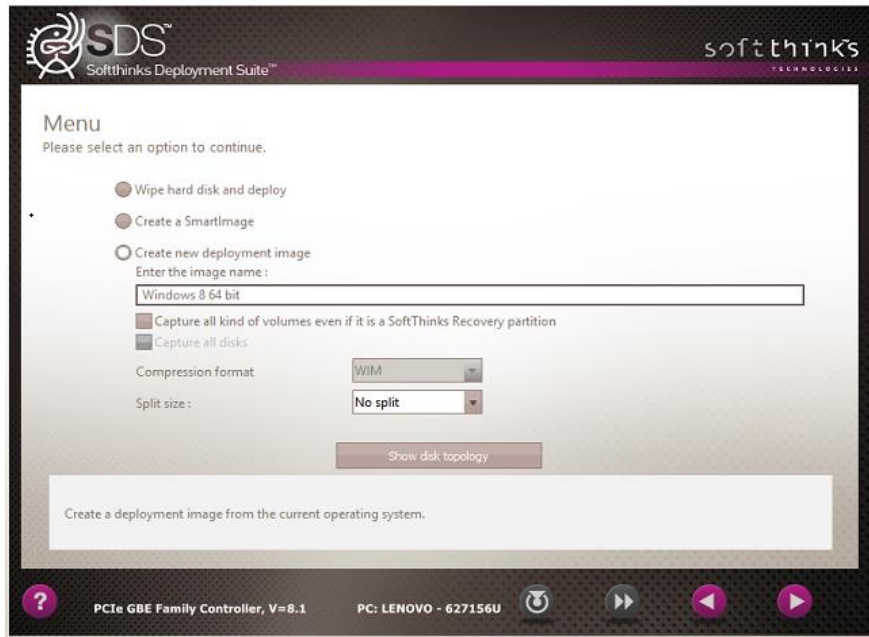
B) PXE Booting the Computer

1. PXE Boot the computer to the server.
 - a. Attach the network cable from a switch that is connected to the SDS server's network to the NIC port on the computer.
 - b. Most computer models require you to hit F12 to select the boot menu. If this does not work for the model you are working on, check the manufacturer's site to find out how to get to the boot menu.
 - c. Once in the boot menu, select to boot from the NIC.
2. The computer will then come up with a choice of the 32 bit or 64 bit bootwims. In most cases, the 64 bit wim can be selected even if you are going to install a 32 bit OS onto the computer. If for some reason the 64 bit wim does not allow the computer to boot, then you select the 32 bit wim.
3. Once the selection is made the computer will download and run the selected Bootwim. It will then connect to the server if the bootwim was configured properly with the server's username, password, and domain.
4. When it is connected to the domain, the SDS files will be installed into the memory of the computer. (Note- If for some reason it cannot install the software, you should check to make sure that the RAM is good.)
5. The computer will then come up to the Welcome Screen below.



C) Image Creation

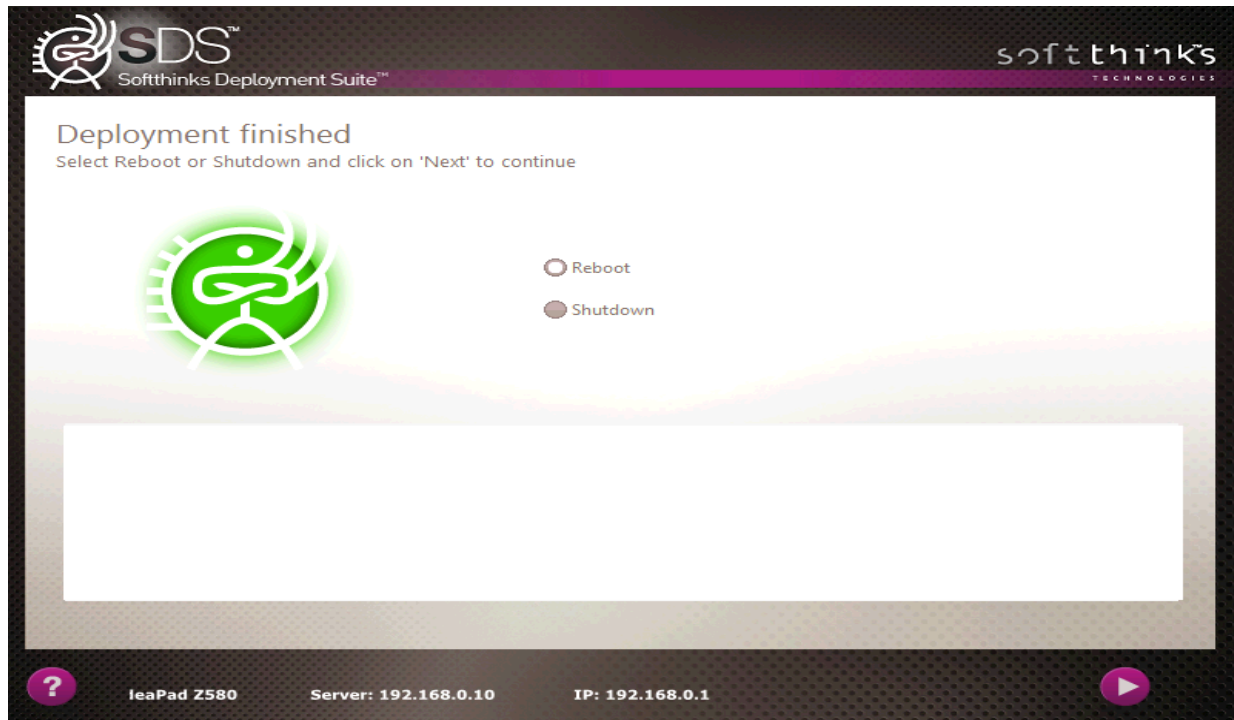
1. To Create the Image type "Test1234" into the Image Creation Code Box in the screen above. The other two boxes can be left empty if you choose. Click the purple arrow at the bottom of the screen. The Menu Page below will open.
 - a. Check the box for Create new deployment image.
 - b. Uncheck the box to "capture all kind of volumes even if it is a Softthinks Recovery partition". WIM will select automatically when the box is unchecked.
 - c. You can enter the description of the image you are going to capture in the Text Box below.
 - d. Leave the Split size as "No Split".
 - e. Click the right Purple Arrow to begin capturing the image.



2. The Image Capture Process will proceed like below.



3. At the end of the operation, a final window will appear and will prompt you to restart or shutdown the computer.

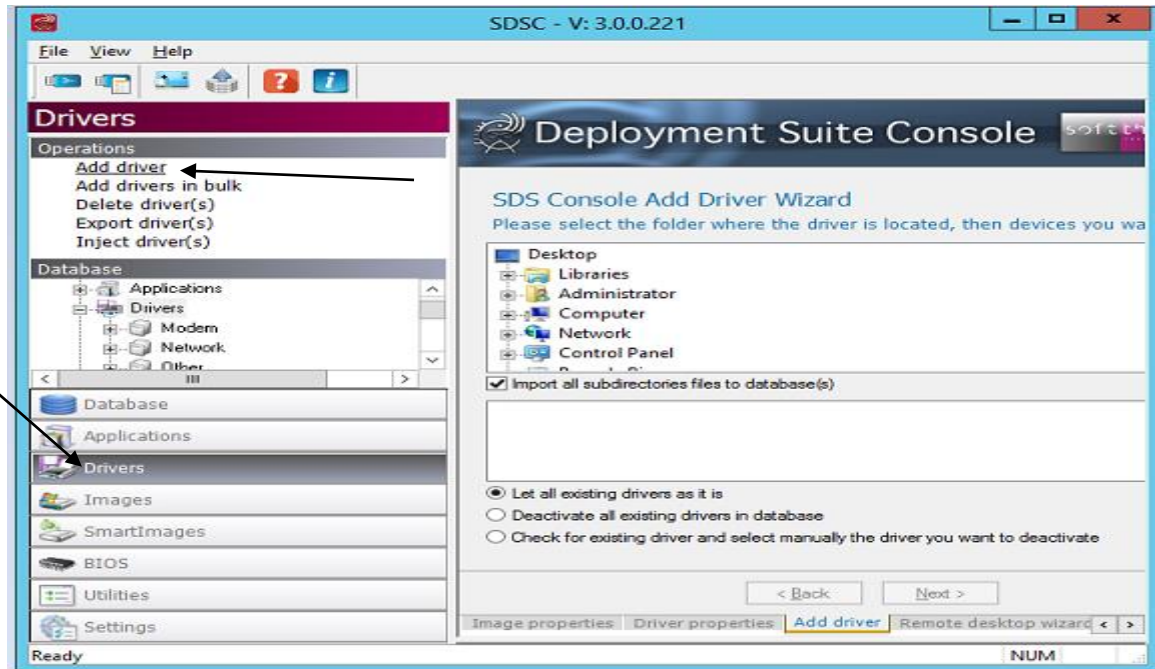


III) Driver management

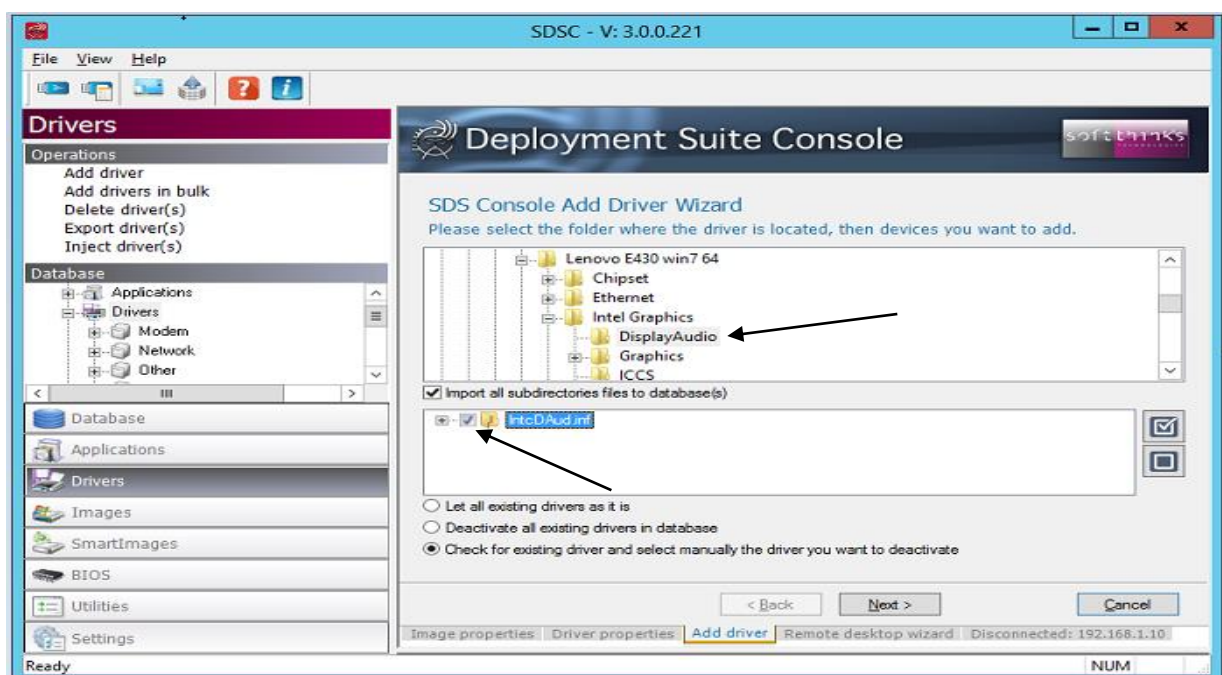
A large database of Drivers will be included with the software. However, given the large number of computer manufacturers, computer models and operating systems, there will sometimes be a need to add additional drivers to your database.

A) How to add a Driver

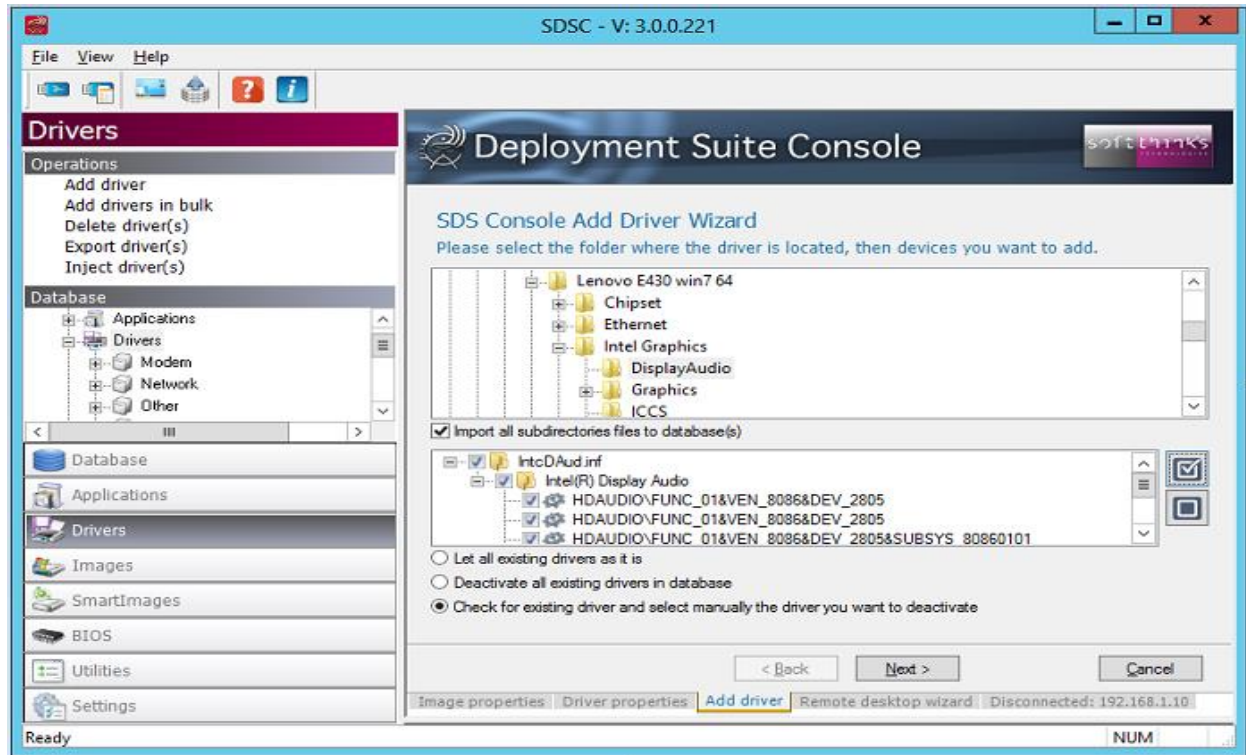
1. In the console click on "Drivers" on the left menu and select "Add driver".



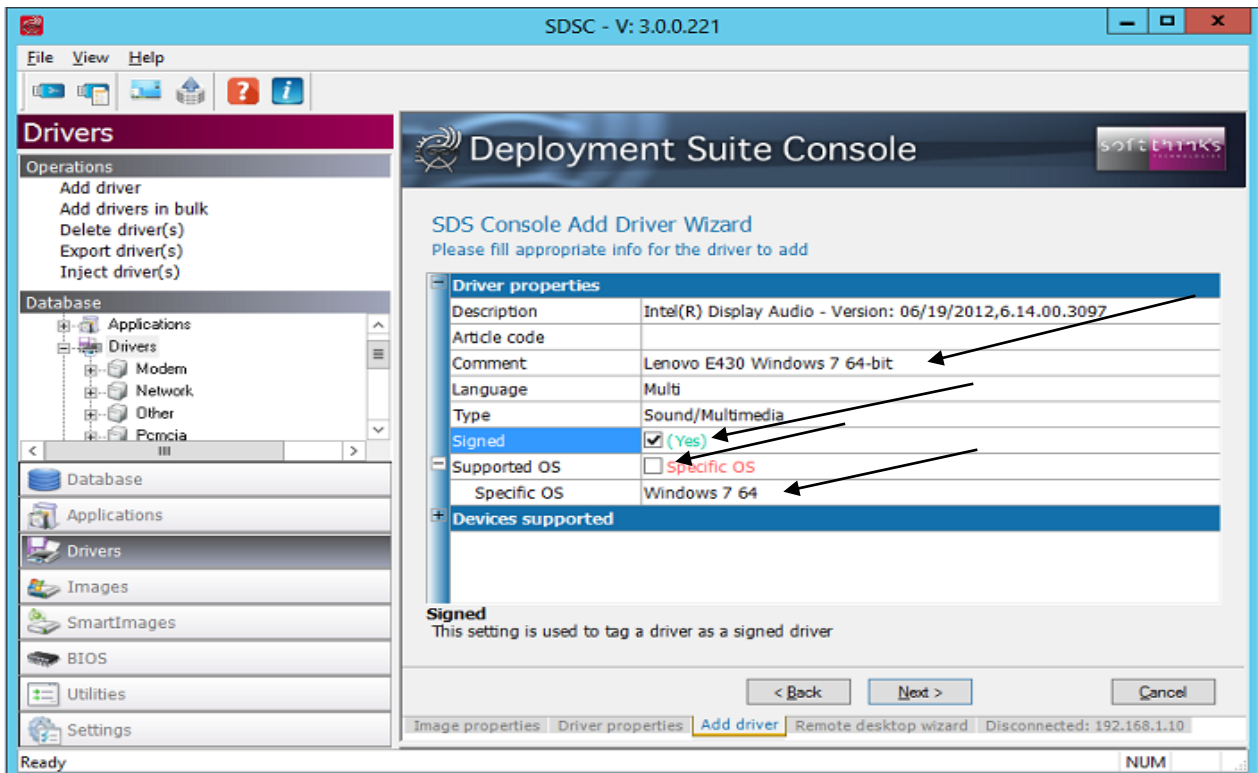
2. In the top right section, browse to the folder containing the driver you want to add and click on the box next to any drivers listed. Then click Next.
 - a. If you select Let all drivers as it is, the drivers will get installed without checking for duplicates.
 - b. If you select Check for existing driver and select manually the driver you want to deactivate. Then SDS will search the database to see if the driver is already installed in the database and allow you to deactivate the existing drivers.



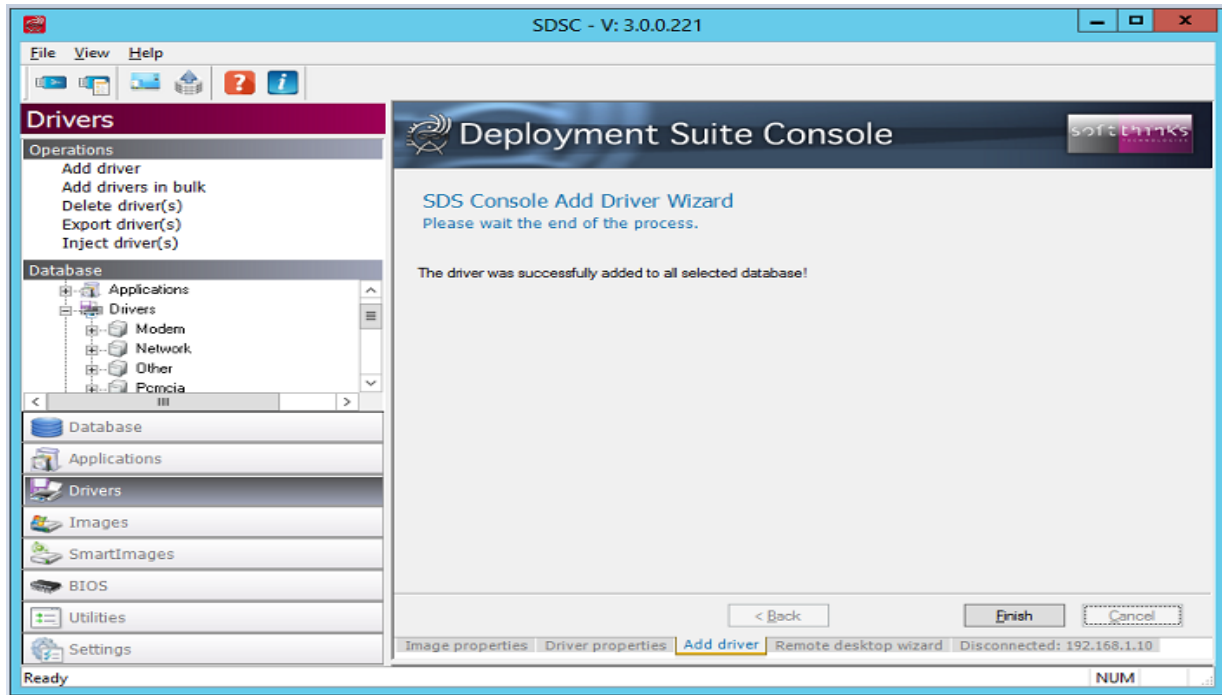
- c. Clicking on the plus sign next to the drivers listed will show you all of the hardware IDs associated with that driver.



3. The next screen allows you to enter in specific information about the driver such as:
 - a. Comment – Any comment you want to make about the driver (ie. Type of computer its for.)
 - b. Signed – Whether or not the driver is signed by Microsoft
 - c. Supported OS – The default for this is Multi OS, unchecking the box will change that to specific OS and allow you to select the specific OS the driver is for in the box below it.
 - d. Once your changes are made, click Next.



4. After you click Next you will see the driver install progress and then it will say the addition was successful. Click Finish and repeat the process if you have more drivers to install.

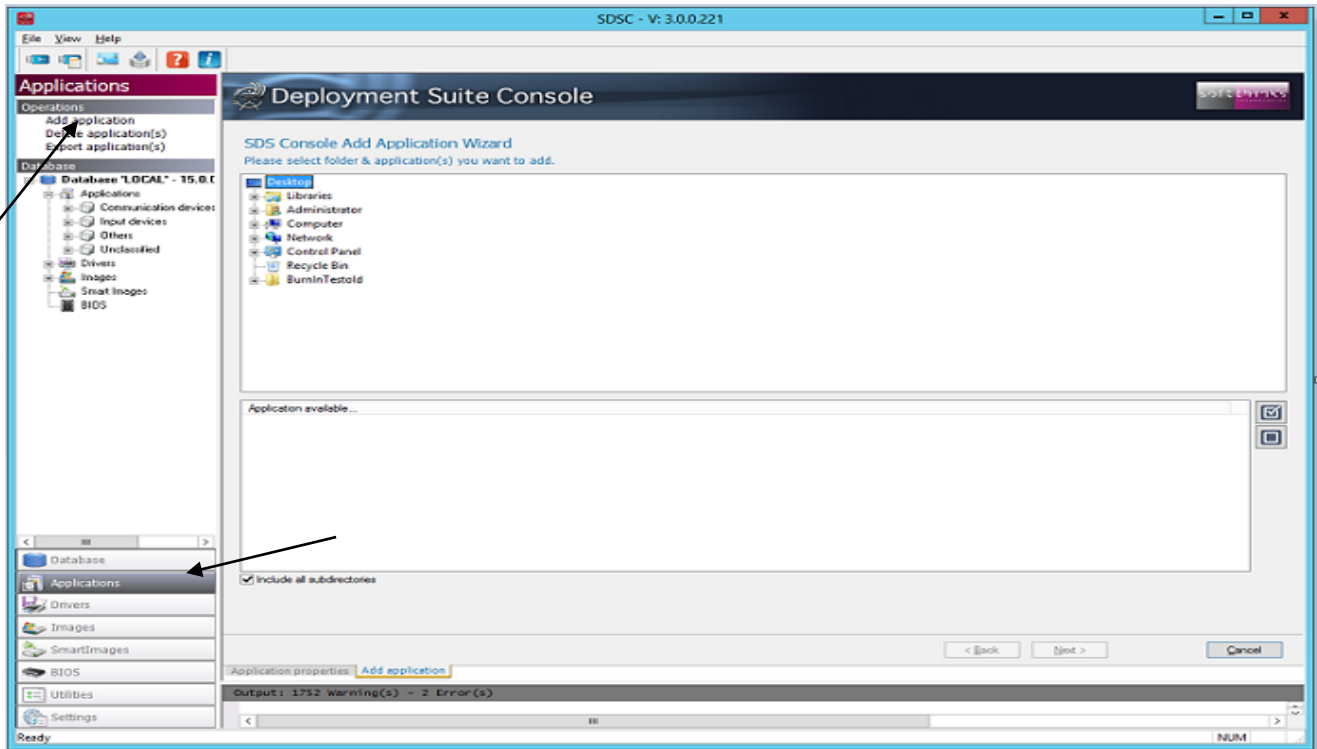


IV) Application Management

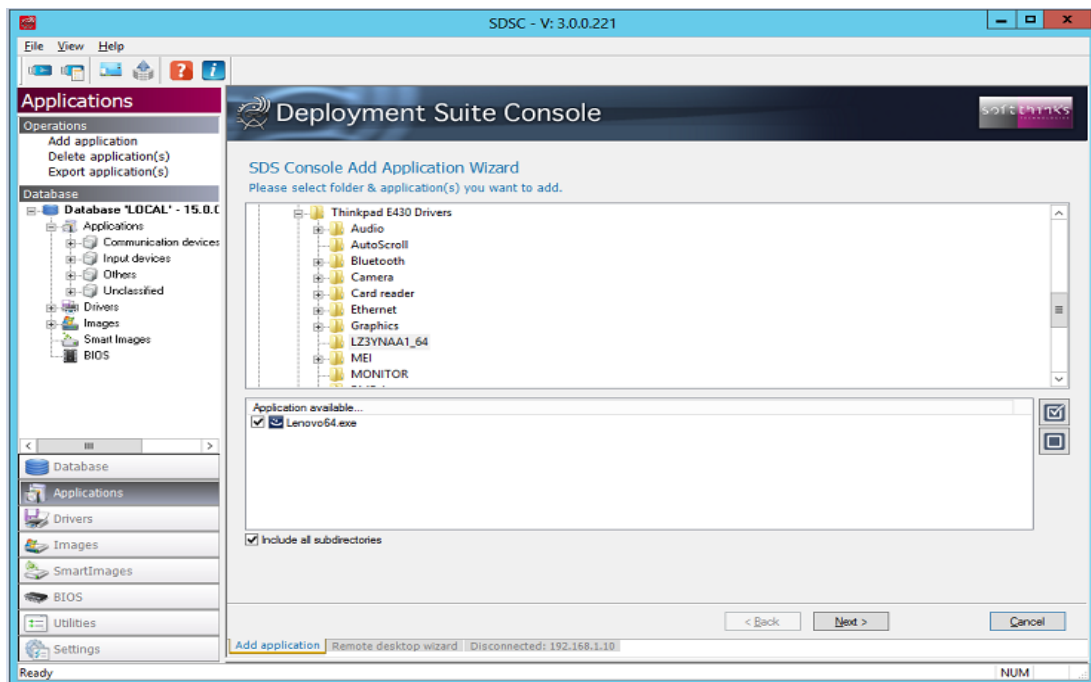
In this section you will learn to add, remove, import and export applications to be deployed in the SDS4MAR flow.

A) How to add an application

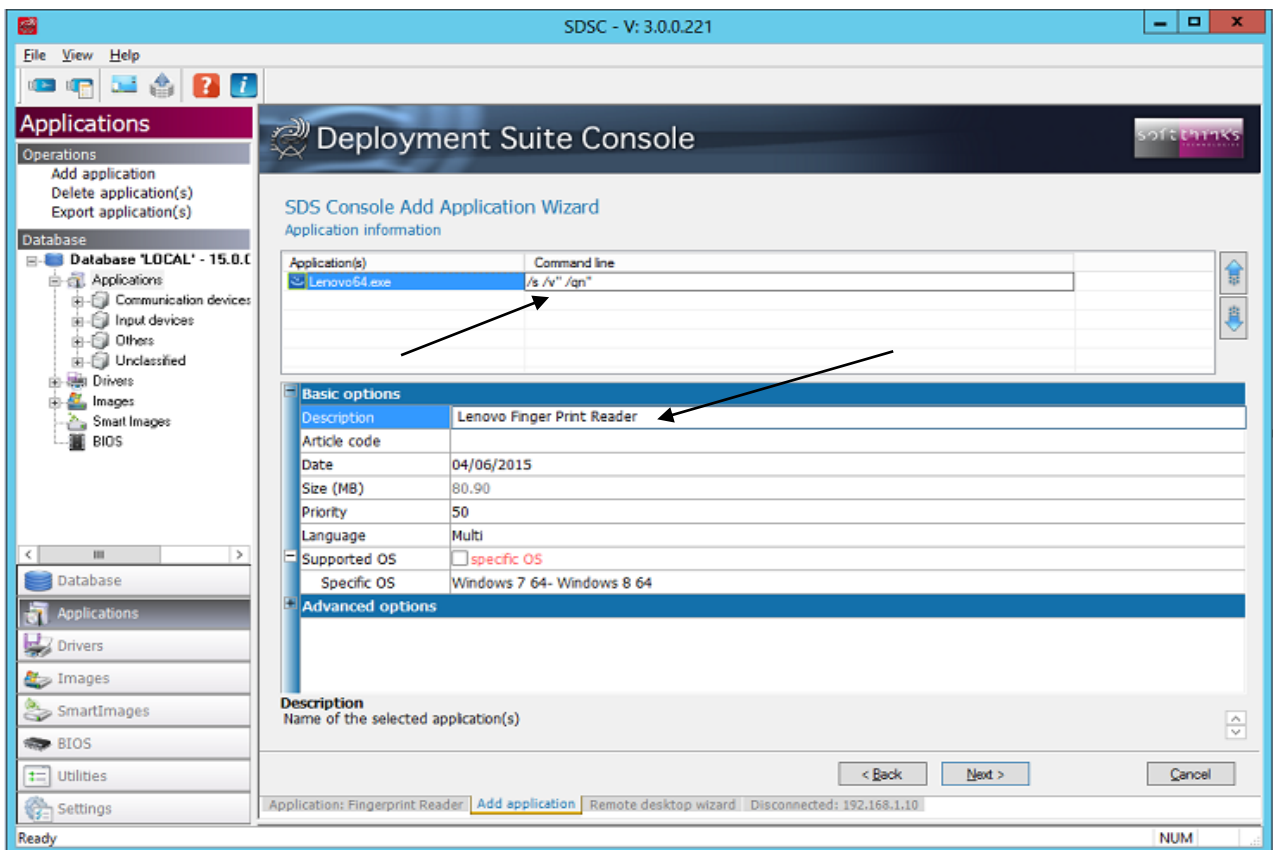
1. Open the SDS Console and navigate to the Applications section by clicking on Applications on the left hand side of the screen.
2. Click on Add application and the below screen will appear




- In the top box on the right browse to the folder containing the application. In the bottom box on the right, put a check in the box next to .EXE file of the application. (This can be a .CMD file as well.) Click Next.



- Add the description you would like for the Application and add the Silent Install Switch in the Command Line section next to the Application. The Silent Install Switch is usually provided by the manufacturer of the software. Make sure to include the "suppress reboot" switch if available.




5. If the application is for a specific version of Windows you will have to select what versions can use it.
 - a. Uncheck the box that says Multi OS.

Application(s)	Command line
 Lenovo64.exe	/s /v" /qn"
+	

Basic options	
Description	Lenovo Finger Print Reader
Article code	
Date	04/06/2015
Size (MB)	80.90
Priority	50
Language	Multi
Supported OS	<input checked="" type="checkbox"/> (Multi OS)
Specific OS	

Advanced options	
Type	Undefined
Class	Unclassified
File version	1

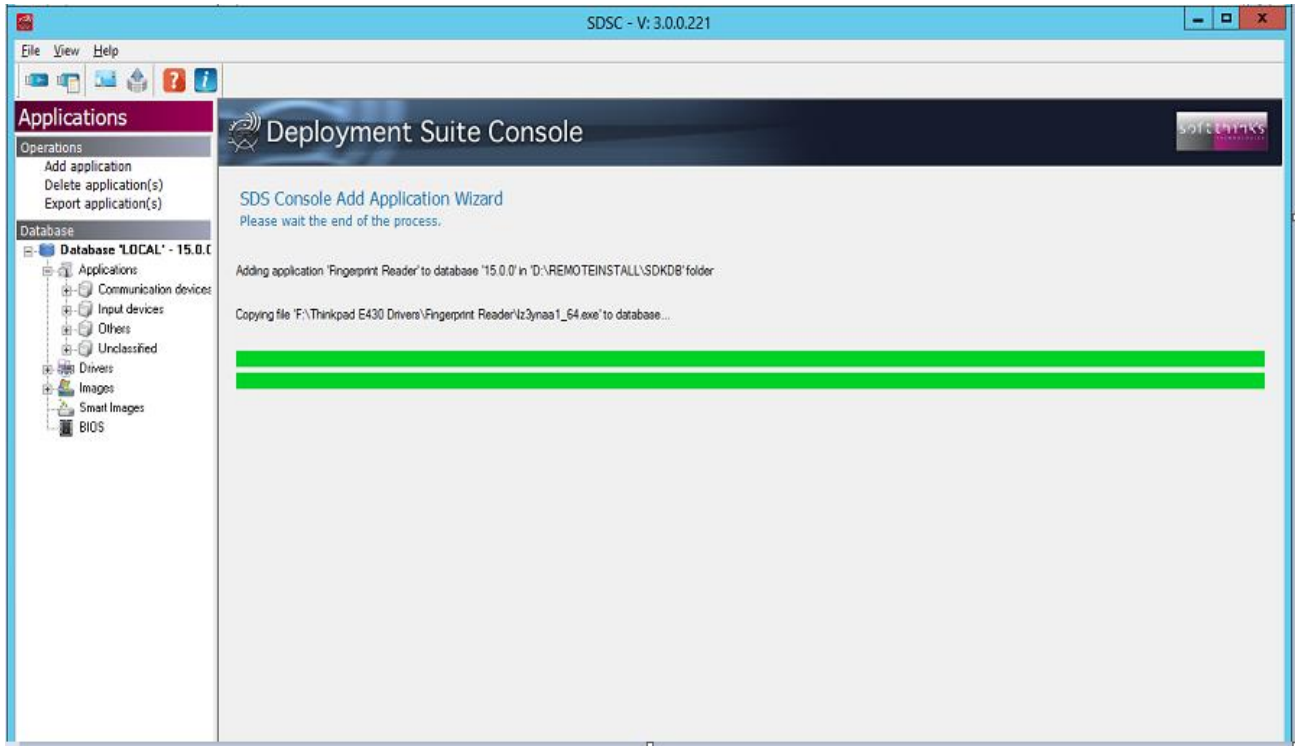
- b. Click in the space next to Specific OS and from the drop-down select the versions of Windows that can use the software.

Application(s)	Command line
 Lenovo64.exe	/s /v" /qn"

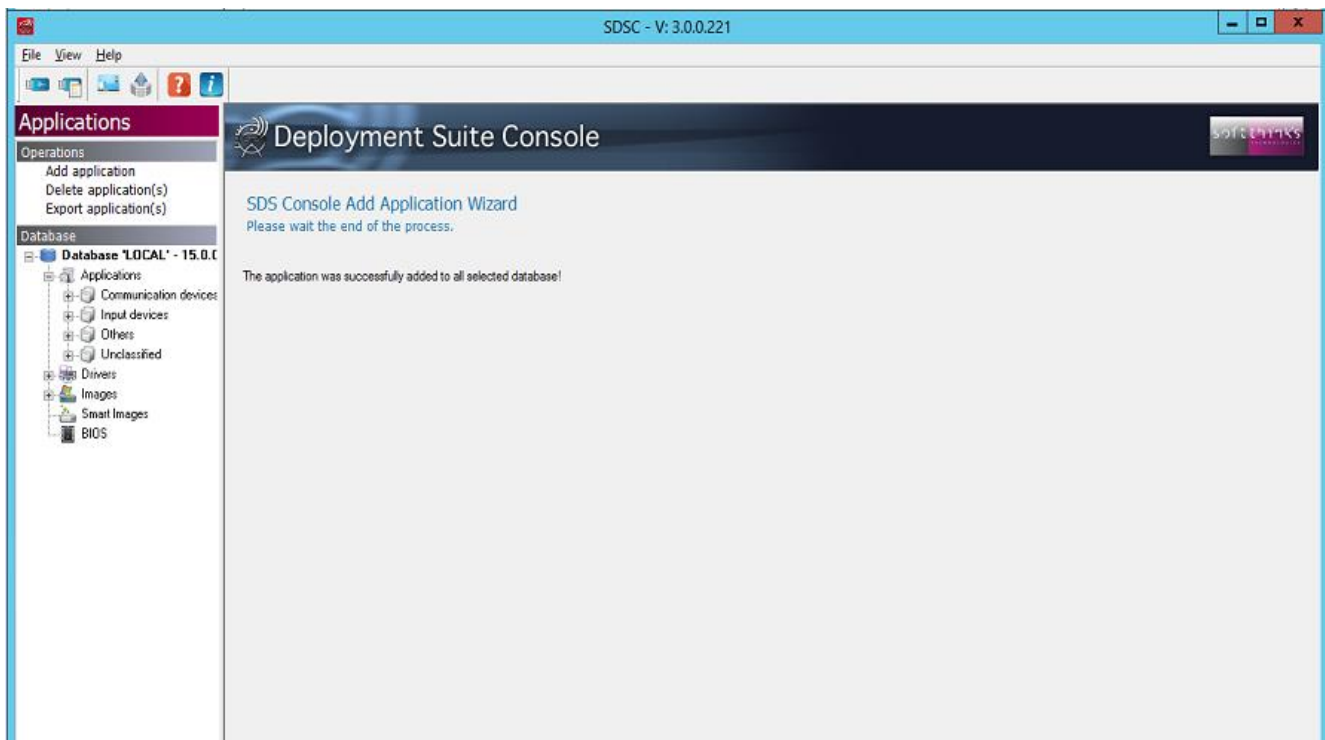
Basic options	
Description	Lenovo Finger Print Reader
Article code	
Date	04/06/2015
Size (MB)	80.90
Priority	50
Language	Multi
Supported OS	<input type="checkbox"/> (Specific OS)
Specific OS	Windows 7 64- Windows 8 64

Advanced options	
Type	Undefined
Class	Unclassified
File version	1
Delay 1 (sec)	0

6. Once you have all the options you would like selected, click on Next on the bottom right of the page. You will see the files being copied to the SDS database.



7. Once all the files have been copied, you will see the below screen letting you know the application was added successfully. Click on Finish.



8. The screen will change to show you that the application has been added to the database and is listed.

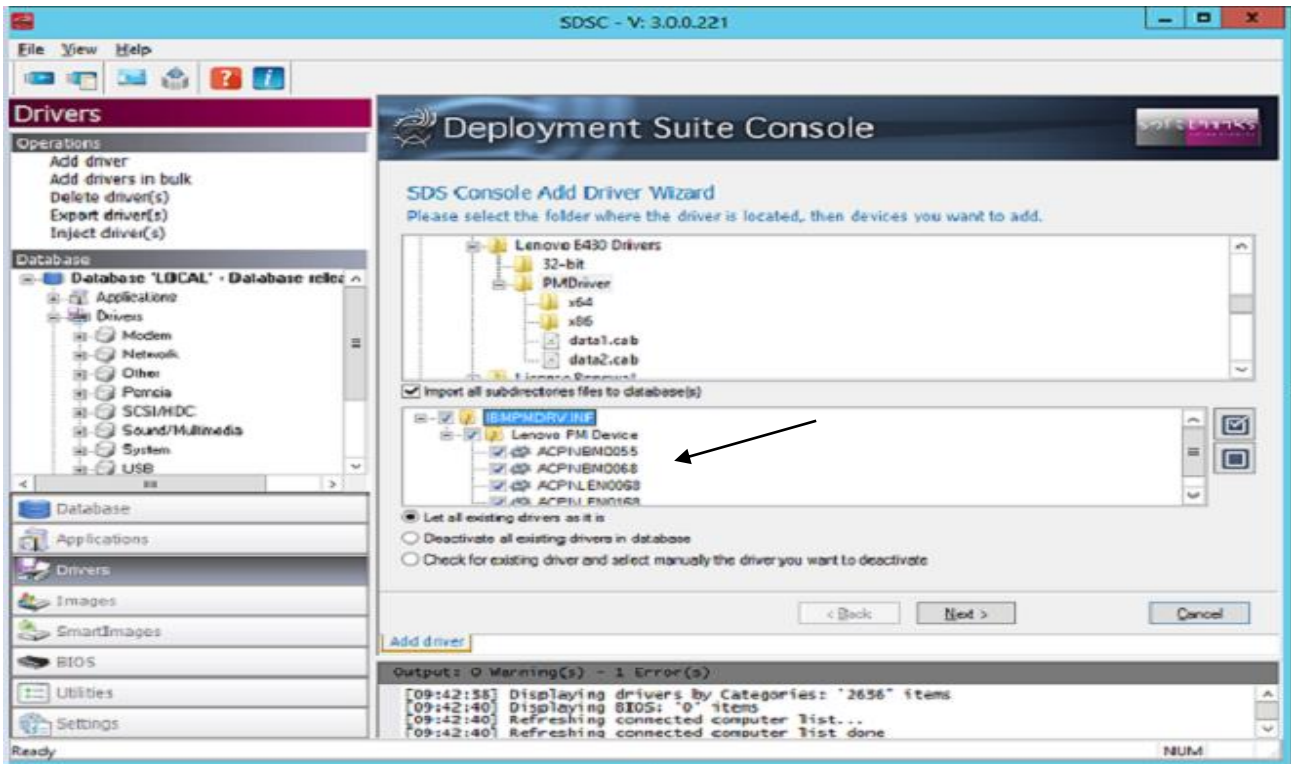
B) How to modify an existing application:

1. Open SDS Console and click on Applications on the left hand side of the screen.
2. Highlight the application you would like to change.
3. Click on Next and make the changes then click the Save button.

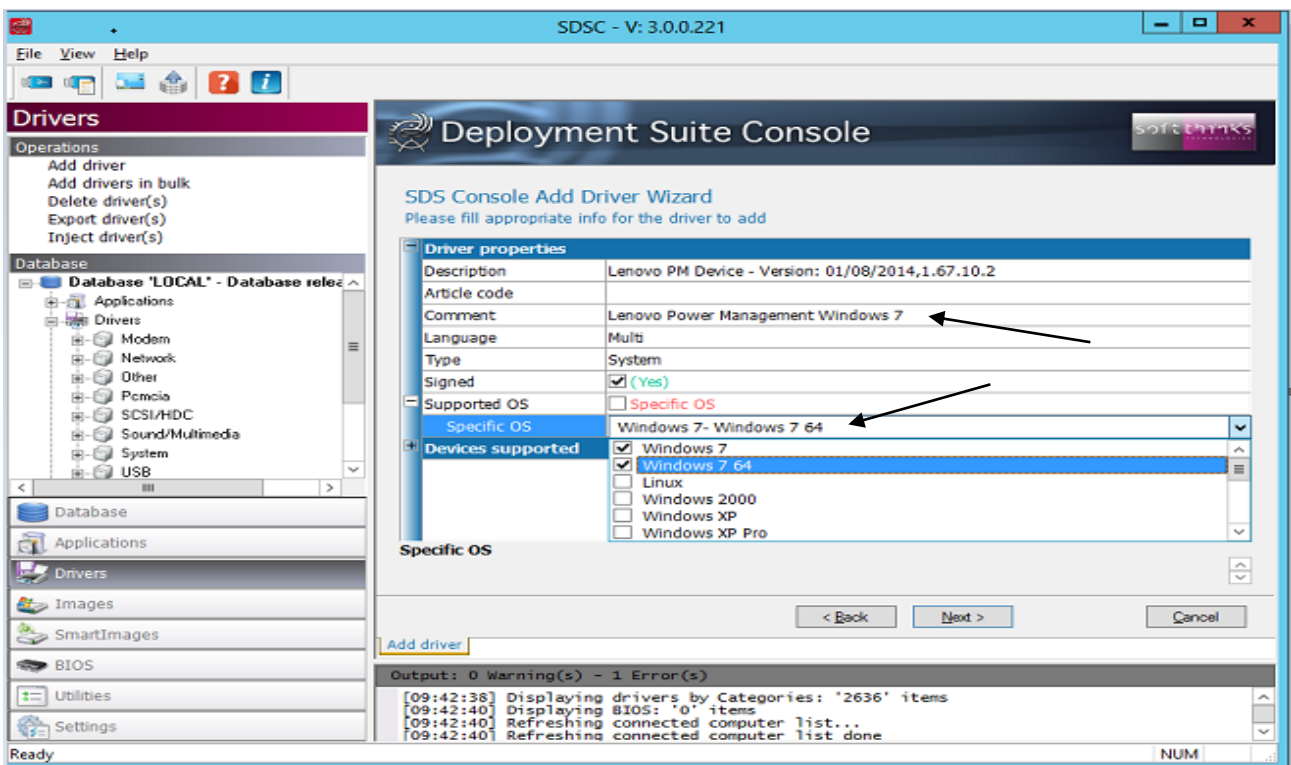
C) Adding a Bundled Application

Sometimes applications needed for a computer require that the application be bundled with specific drivers.

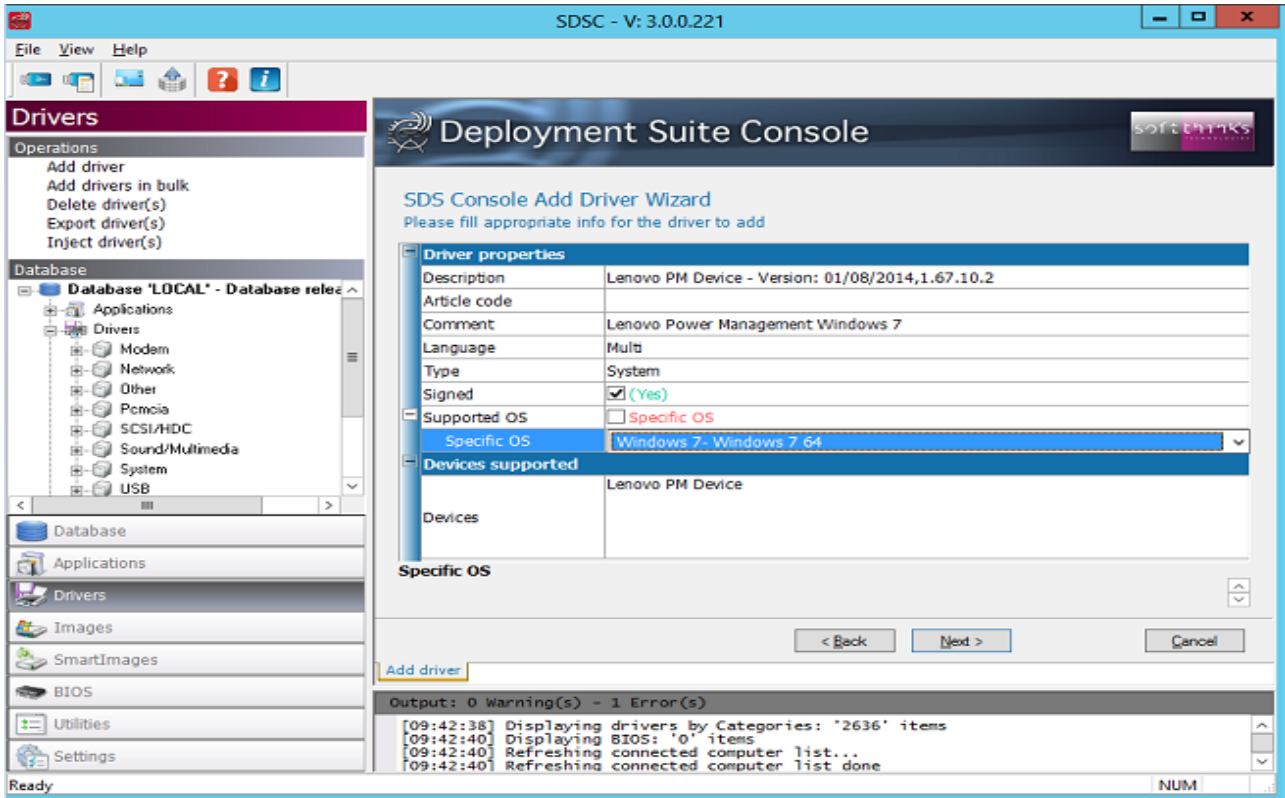
1. Download the application from the manufacturer's website.
2. Extract the files to a known location on the server or an external storage device.
3. Follow the steps in section IV "Driver Management" to add the driver for the bundle to the application.
 - a. When you get to step IV) A) 2. c. make a note of the hardware IDs that are listed as you will need them later in this process.



- b. Click Next and then enter in your Comments and select the OS that is specific for the driver.

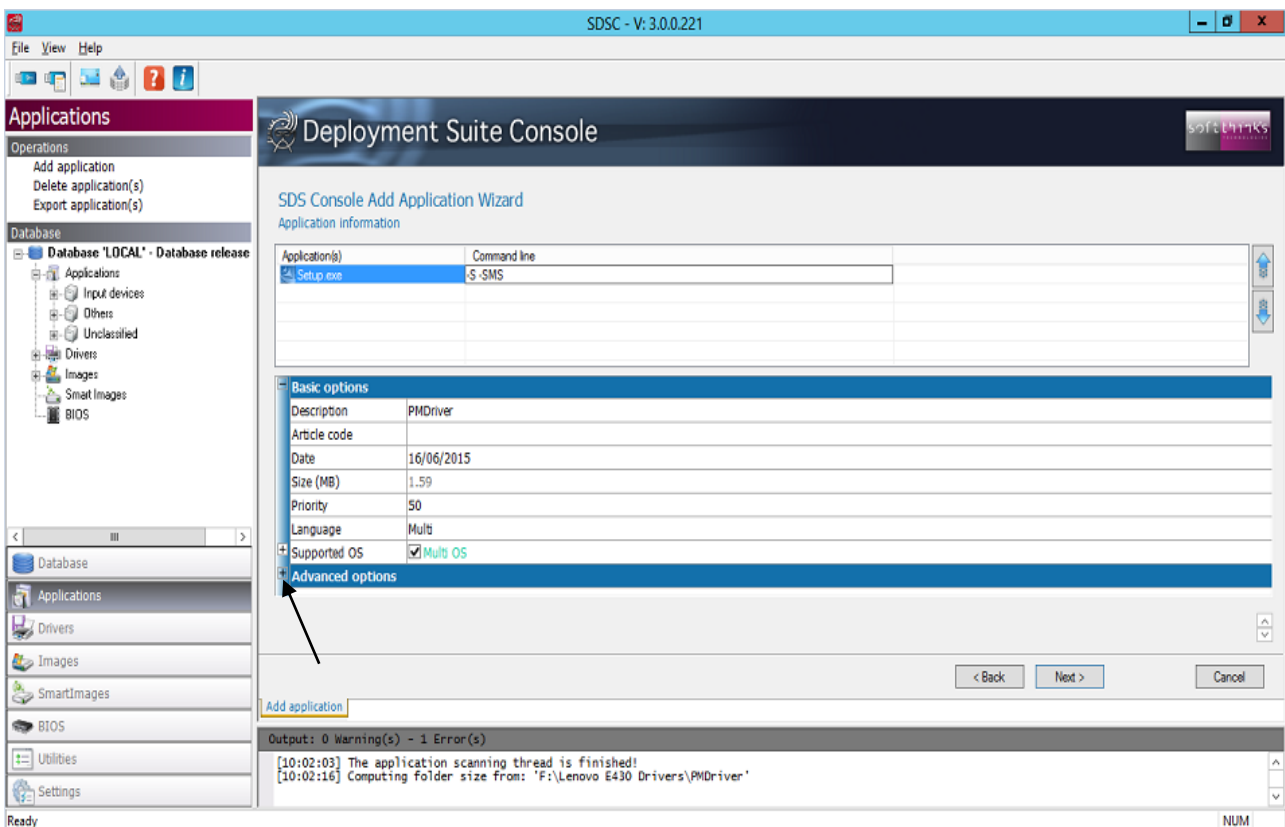


- c. Clicking on the “+” Next to Devices supported will tell you what the name of the hardware the driver is associated with. Click next and the Driver will install.



4. Next you want to install the Application.

- a. Follow the steps in the How to Add an Application section V) A) above. Follow the steps down through V) A) 5. b. Then click on “+” next to Advanced options below.



- b. Click in the text box next to Type and select “Bundle”.

Supported OS: ☒ Multi OS

Advanced options

Type	Bundle
Class	Undefined
File version	Classic
Delay 1 (sec)	0
Delay 2 (sec)	Microsoft KB
Always install	<input type="checkbox"/> (No)
Audit install	<input type="checkbox"/> (No)

Type: Application package type

< Back Next > Cancel

- c. Click the text box next to Class and select the type of hardware that the Bundle is for. (In this example it's “Others”).

Supported OS: ☒ Multi OS

Advanced options

Type	Bundle
Class	Others
File version	Unclassified
Delay 1 (sec)	Communication devices & system components
Delay 2 (sec)	Input devices
Always install	<input type="checkbox"/> (No)
Audit install	<input type="checkbox"/> (No)

Class: Application class in which an application could be classified

< Back Next > Cancel

- d. Scrolling down further in Advanced options will show more options that can be selected such as Audit Install. Once all of the choices are made click Next.

Delay 2 (sec): 0

Always install: ☐ (No)

Audit install: ☒ (Yes)

CLS install: ☐ (No)

End user install: ☐ (No)

Wait child install: ☐ (No)

Copy to CD: ☒ (Yes)

QFE: ☐ (No)

Reboot 1: ☐ (No)

End user Install

< Back Next > Cancel

5. After the Application installs, go back into the Application Properties page, select the Application and click Next.

SDSC - V: 3.0.0.221

Applications

Operations: Add application, Delete application(s), Export application(s)

Database: Database "LOCAL" - Database release

Description	Language	OS	Type	Article code
PC Angel 1.2.8 x64	Multi	Windows 7 64 - Windows 8 64	Undefined	
HP Quick Launch Buttons	Multi	Multi	Bundle	APP0000003
Lenovo 32bit Fingerprint Reader	Multi	Windows 7 - Windows 8	Undefined	APP0000006
Lenovo Energy Management	Multi	Multi	Bundle	APP0000005
Lenovo 64bit Fingerprint Reader	Multi	Windows 7 64 - Windows 8 64	Undefined	APP0000004
Office 2013 Preload	Multi	Multi	Undefined	
Kaspersky for DLS	Multi	Multi	Undefined	
PC Angel 1.2.8 x86	Multi	Windows 7 - Windows 8	Undefined	
Lenovo Win 7 PM Driver	Multi	Windows 7 - Windows 7 64	Bundle	

Details

Path: D:\REMOTEINSTALL\SDKDRAPPS\MUL\APP0000003

Priority: 50

Size: 1.59 MB

Importation date: 2015/06/16 - 10:02:16

Reboot: N/A

Next > Cancel

- a. You will now see a box next to Type that says “Edit PNP” Click on that box.

SDS Console Application properties
Application Information

Application(s)	Command line
Setup.exe	-S -SMS

Specific OS: Windows 7- Windows 7 64

Advanced options

Type	Bundle
Class	Others
File version	1
Delay 1 (sec)	0
Delay 2 (sec)	0
Always install	<input type="checkbox"/> (No)
Audit install	<input checked="" type="checkbox"/> (Yes)

Specific OS

Application: Lenovo Win 7 PM Driver

< Back Save Cancel

- b. The Hardware Dependencies page will open up. Click on the box that says “Add Dependency”.

Deployment Suite Console

SDS Console Application properties
Hardware dependencies

- Database hardware
 - Modem
 - Network
 - Other
 - Pcmcia
 - SCSI/HDC
 - Sound/Multimedia
 - System
 - USB
 - Video
- External hardware

Add dependency Edit dependency

Application: Lenovo Win 7 PM Driver

Output: 4 Warning(s) - 1 Error(s)

Ok Cancel

- c. The External PNP box will open up. Fill in the information with the Hardware IDs you wrote down in Section V) C) 3. a. and click OK. Repeat the process for every one of the Hardware IDs that you wrote down.

External PNP

Please fill fields about the new PNP dependency requested

PNP: ACPI\IBM0068

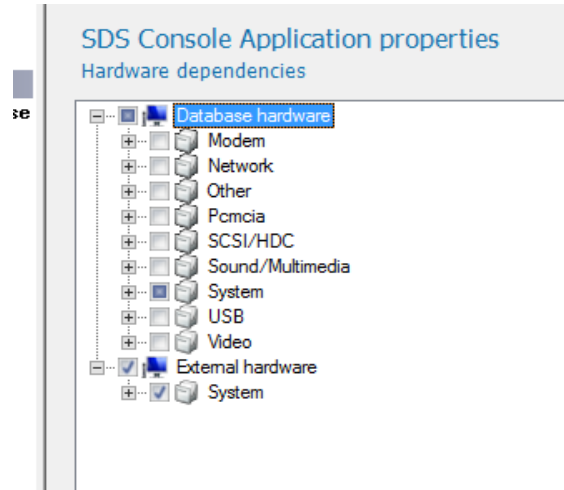
Manufacturer: Lenovo

Description: Power Management

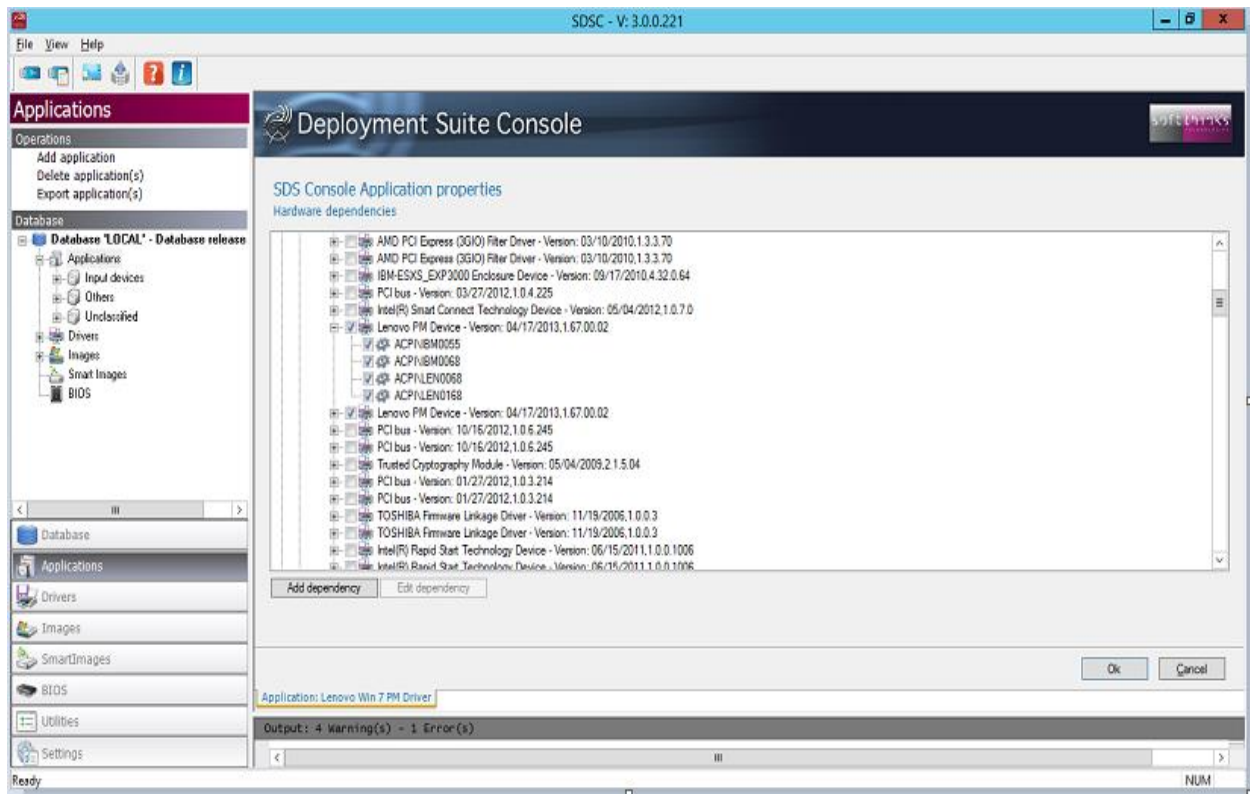
Type: System

OK Cancel

- d. You will now see boxes selected that were blank before as the Hardware IDs are matched with the associated hardware.



- e. Expand out the boxes and verify that the hardware IDs for the checked boxes matches what you entered. Also check to make sure that no other hardware was missed. Once everything checks out, click on OK below.

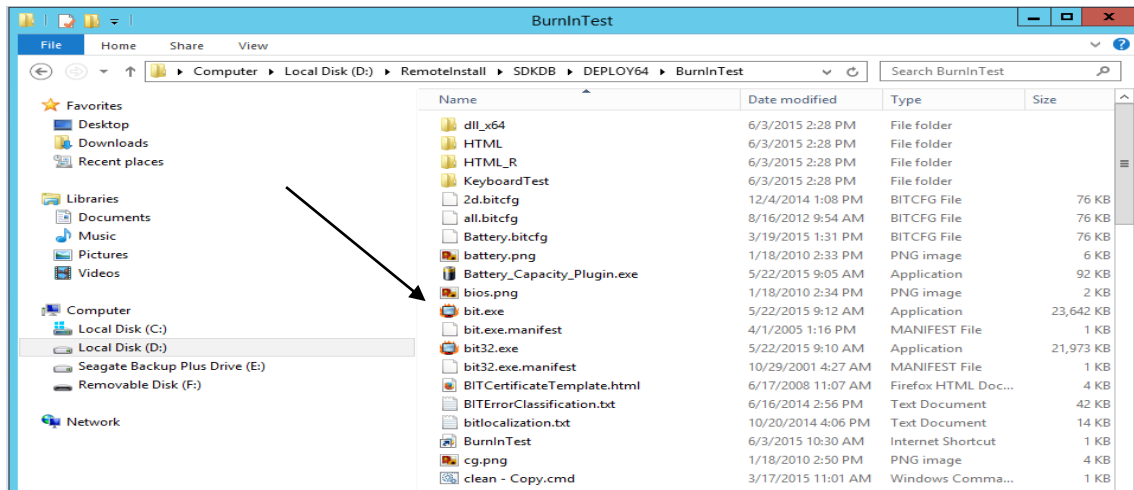


V) Hardware Testing Configuration

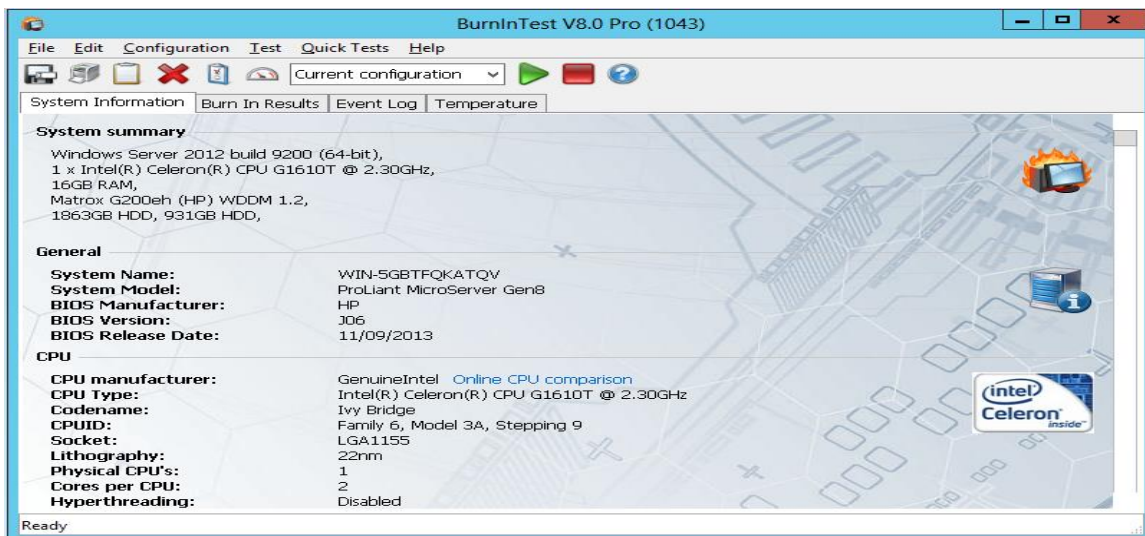
The BurnInTest hardware testing software can be configured to test which ever components you want to test, with as much stress as you want to put on them, for as long as you want to test them for. In this section you will learn how to configure the WinPE Pre-check testing and the post imaging extended Windows Testing.

A) WinPE Testing Configuration:

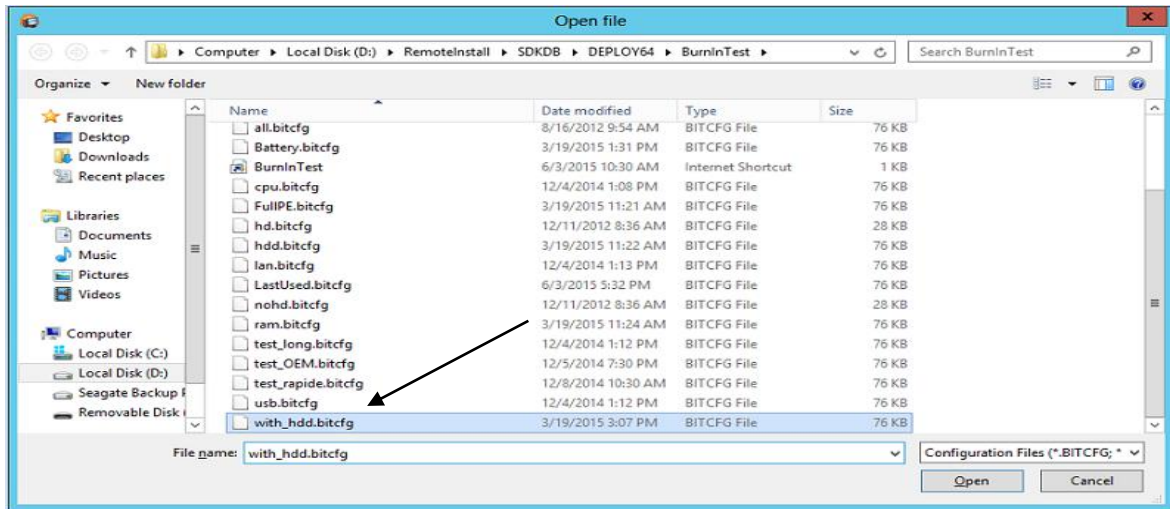
1. To configure the WinPE test setting you need to browse to the SDKDB\Deploy64\BurnInTest folder and double-click on the BIT.exe application.



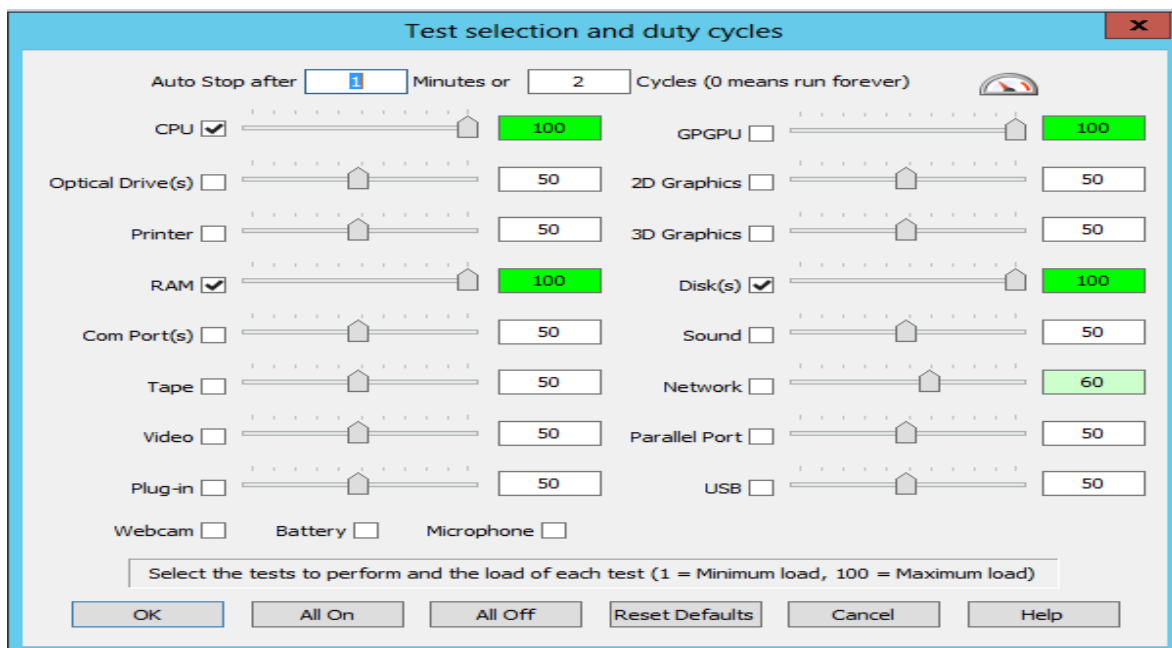
2. BurnInTest will open up and gather the system information.



- For WinPE Testing you need to open the with_hdd.bitcfg file. You do this by clicking on File and then Load Test Configuration. The screen below will open up and you double-click on the with_hdd.bitcfg file. The screen will go back to the main BIT page.

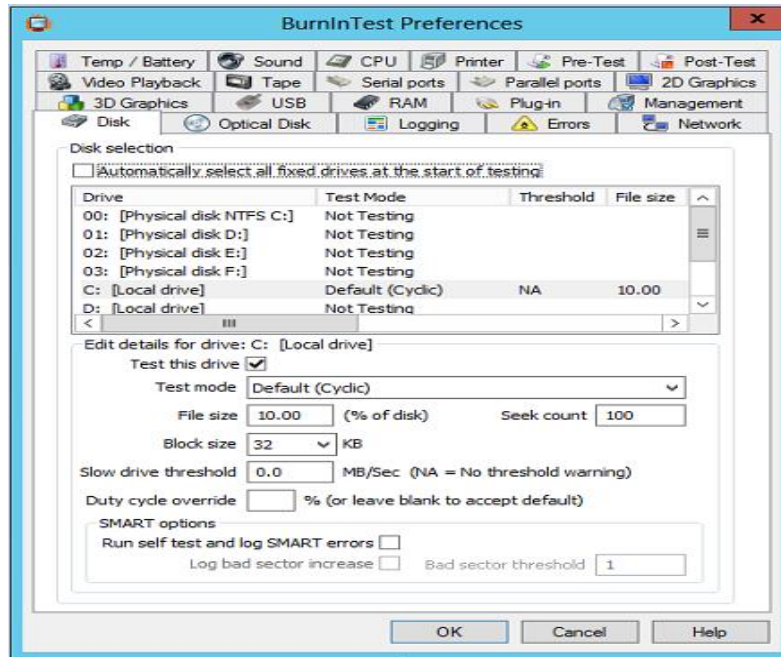


- To select the components you want to test for, the testing length and the amount of stress that you want to put on the components, you select Configuration\Test Selection & Duty Cycles. The screen below will open.

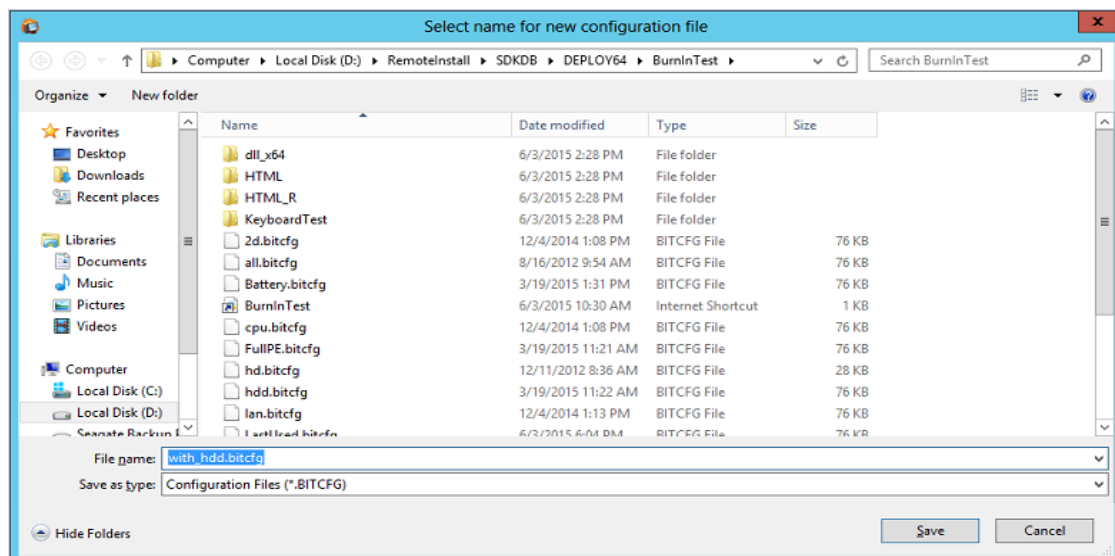


- As the main objective of the Pre-test is to verify that computer you are refurbishing is in good enough shape to get through the imaging process; the defaults for the testing is 1 minute testing for the CPU, RAM and HDD although this can be increased to any amount of time you prefer. Changing the numbers next to the components will increase or decrease the stress on each component and they can be set individually. You can select to test other components, although many of the components are driver based and cannot be tested in the WinPE environment such as 2D and 3D Graphics, Webcam, Microphone, Sound, Video, Printer, Tape, and Network.

6. If you want to make changes to how the tests are run or how the results are reported, then from the main screen you select Configuration\Test Preferences. The screen below will open up.

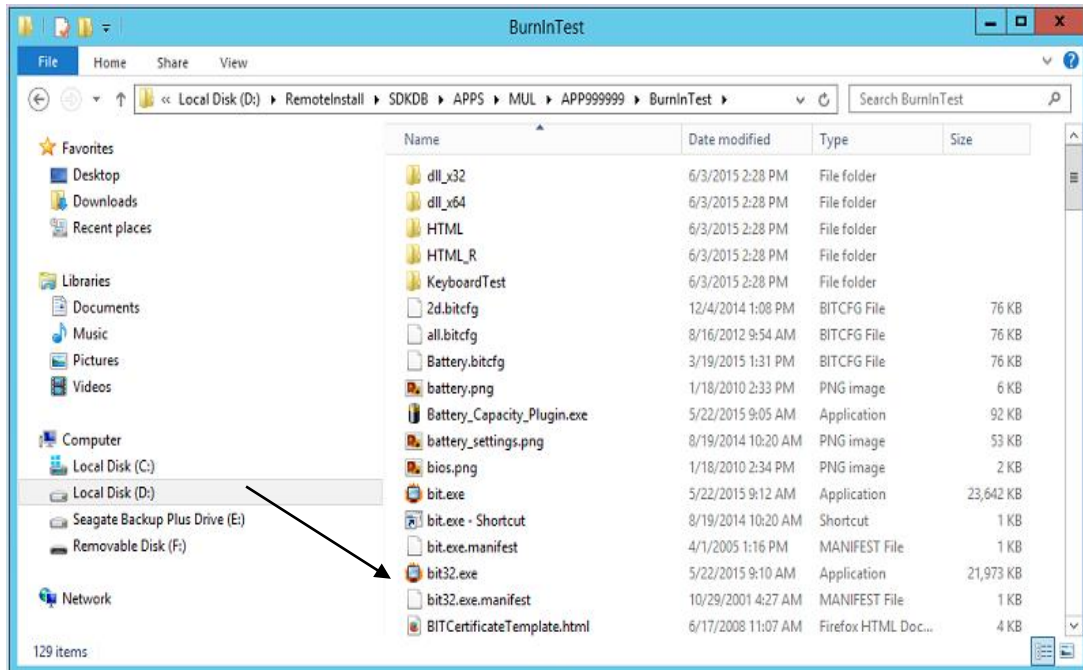


7. From the screen above you can make changes to how some of the tests are run and the default limits of some of the components. Click on Help\Help from the main screen for information on what changes can be made.
8. Once you testing preferences are changed, the changes need to be saved. On the main screen click on File\Save Test Configuration As. The screen below will open up. The name of the file that you opened should be listed in the "File name:" box. If so then click "Save" and the window below will close. You can then exit out of the BIT software.
9. The with_hdd.bitcfg can then be copied to the SDKDB\DEPLOY\BurnInTest folder and overwrite the existing file there.

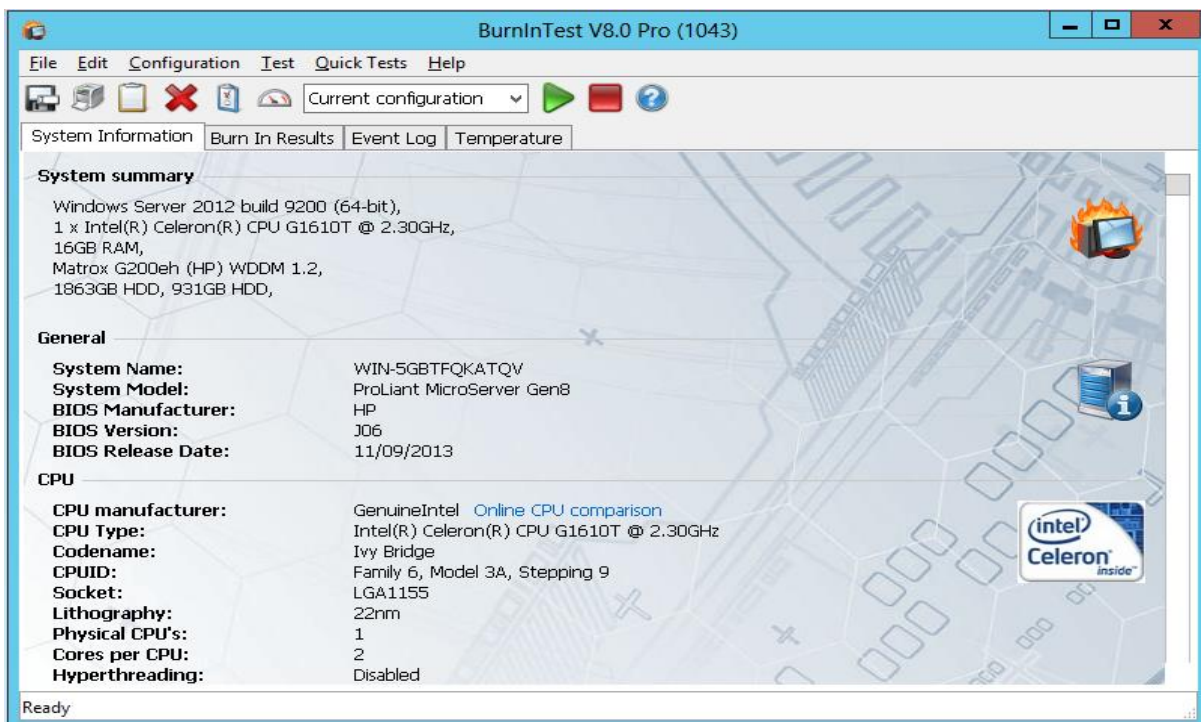


B) Post-imaging Windows Extended Testing Configuration:

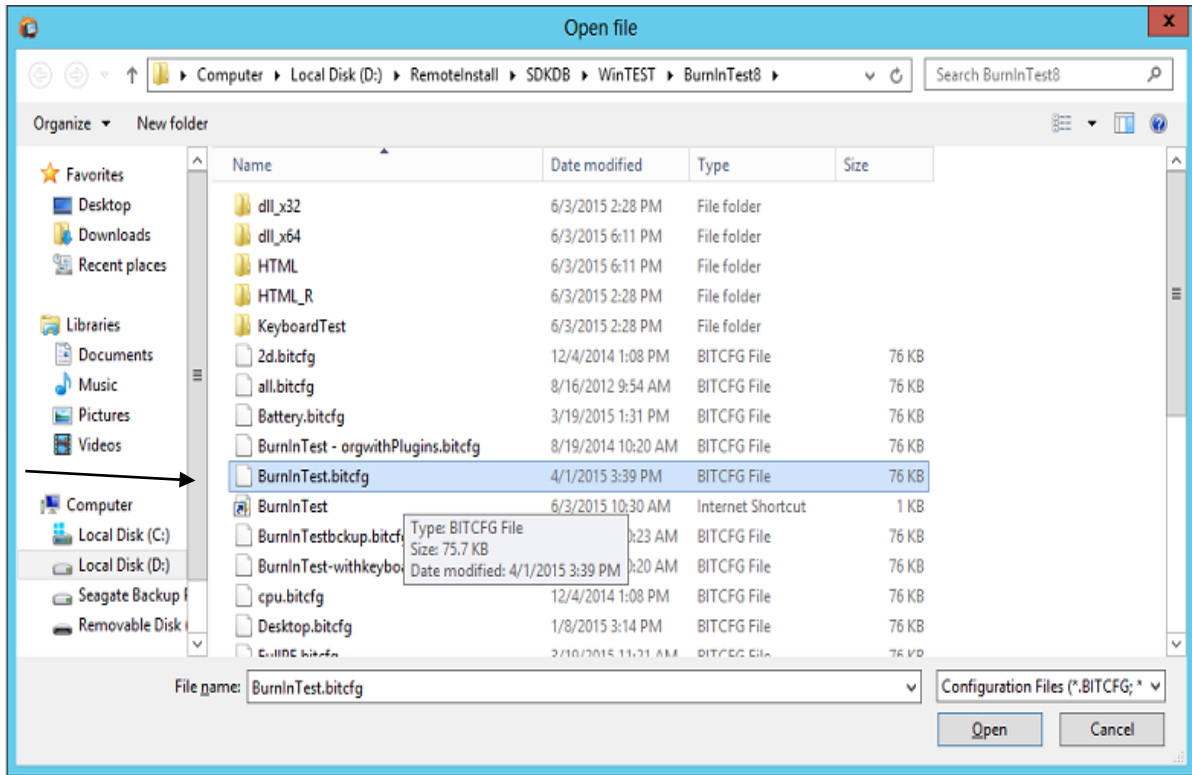
1. BIT is opened from a different location for the Post-imaging testing. BurnInTest is included as an Application with the software. To configure BIT for the post-imaging testing, you will need to go to SDKDB\APPS\MUL\APP999999\BurnInTest and double-click on bit.exe.



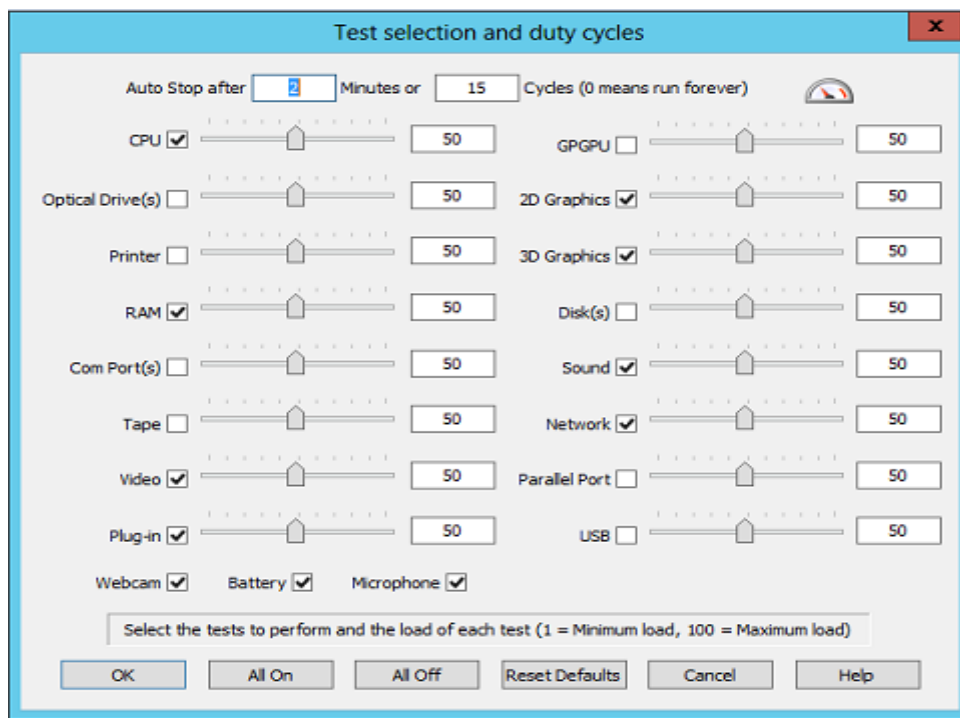
2. The BurnInTest Main Screen will open up.



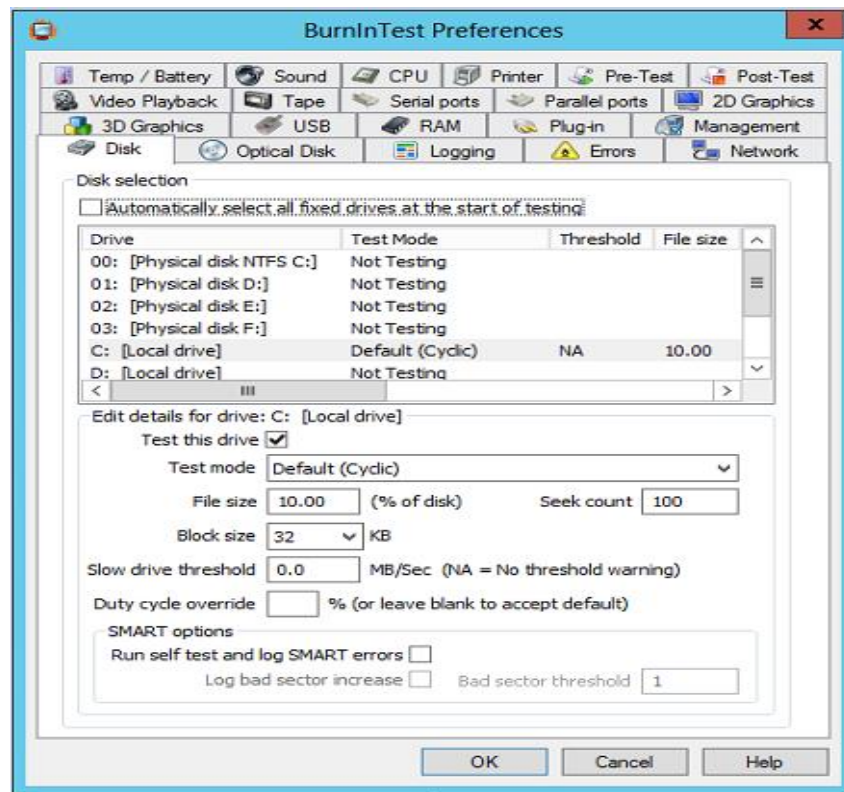
- To open the configuration file for the post-imaging testing go to File\ Load Test Configuration. Select BurnInTest.bitcfg from this page and double-click or highlight it and click Open. The screen will return to the main BIT screen above.



- To select the components you want to test for, the testing length and the amount of stress that you want to put on the components, you select Configuration\Test Selection & Duty Cycles. The screen below will open.

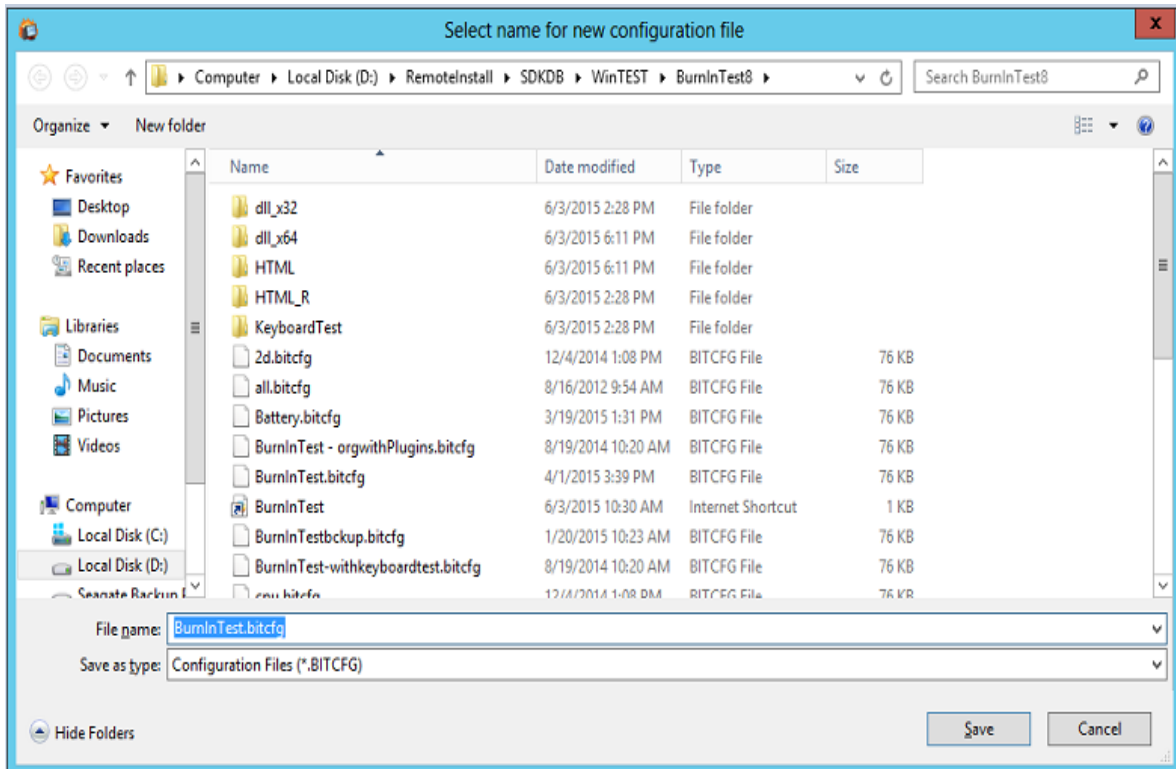


5. Notice the additional tests that are selected. The time can be increased, as 5-10 minutes is the usual recommended time for post-imaging extended testing. Changing the numbers next to the components will increase or decrease the stress on each component and they can be set individually. The Plug-in is the Keyboard Test which is a separate software that will run with the testing. It will be the first component tested for on each computer.
6. As with the WinPE testing, if you want to make changes to how the tests are run or how the results are reported, then from the main screen you select Configuration\Test Preferences. The screen below will open up.



7. From the screen above you can make changes to how some of the tests are run and the default limits of some of the components. Click on Help\Help from the main screen for information on what changes can be made.

8. Once you testing preferences are changed, the changes need to be saved. On the main screen click on File\Save Test Configuration As. The screen below will open up. The name of the file that you opened should be listed in the “File name:” box. If so then click “Save” and the window below will close. You can then exit out of the BIT software.



9. Unlike the WinPE testing, the 64 bit or 32 bit version of the software is selected for automatically so the BurnIntest.bitcfg does not need to be copied anywhere else.

VI) SDS4MAR Flow

In this section you will learn how to perform the deployment process.

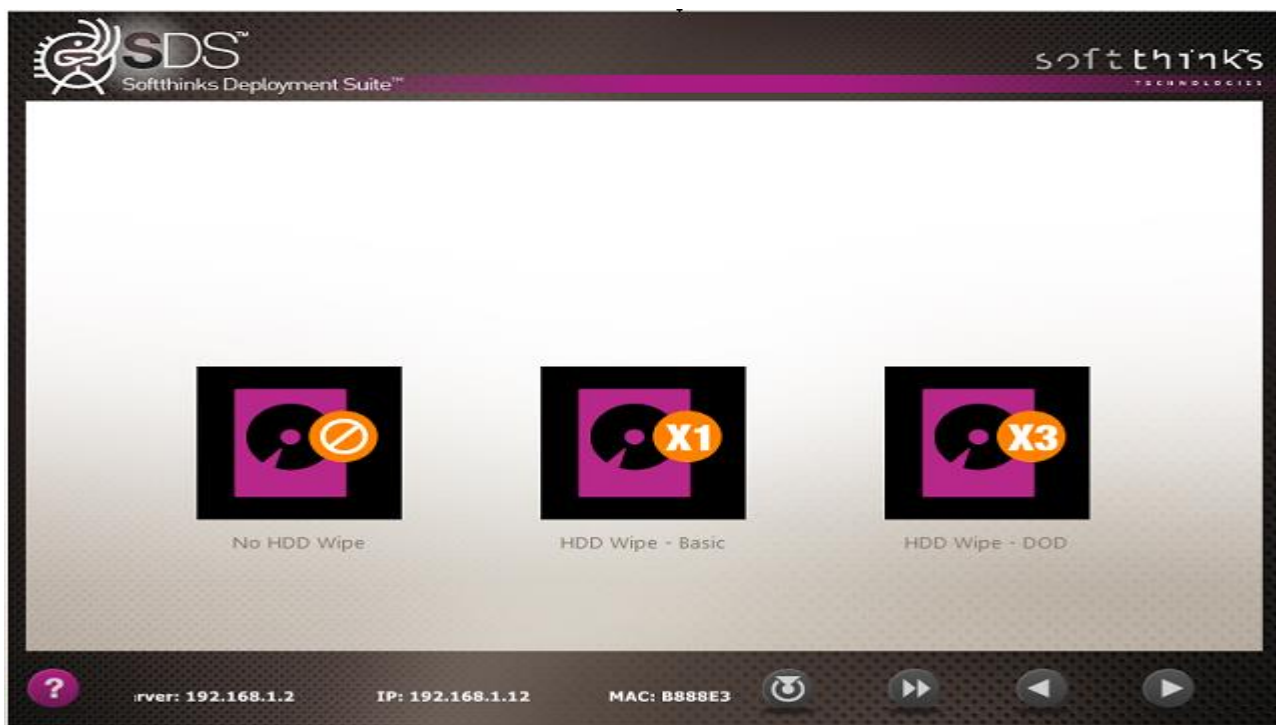
A) PXE Boot the computer to the Server.

See section 3B on page 3 for instructions.

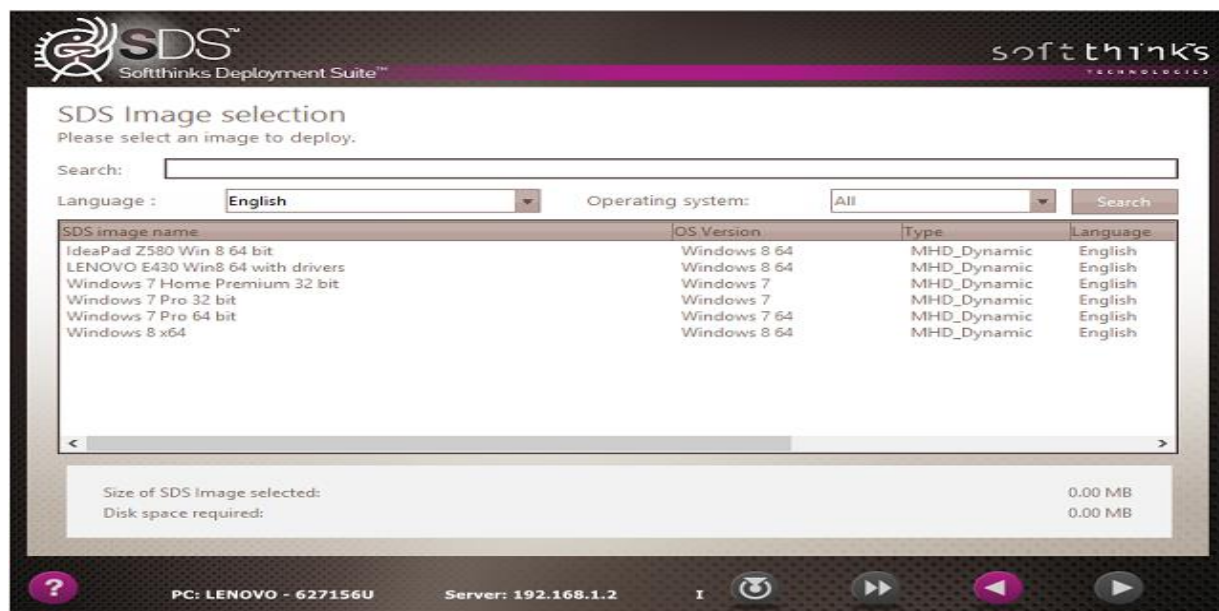
B) Pre-imaging Selection Pages.

1. After the SDS Software is loaded to the computer the Welcome Screen will appear.
 - a. Unlike in the Image Creation in Section 3C, for image deployment you will leave the Image Creation Code box blank. You can enter in Technician ID or Asset ID if you want.
 - b. If you don't want to do pre-imaging hardware diagnostic testing, uncheck the box in front of Hardware Precheck.
 - c. If you don't want to do post-imaging hardware diagnostic testing, uncheck the box in front of Windows Test.
 - d. After your selections are made click on the right facing purple arrow at the bottom of the page.

2. The next screen is where you make your Disk Wiping choice.
 - a. 1st button is no wipe,
 - b. 2nd button is the SoftThinks ADISA Certified Single Pass Wipe,
 - c. 3rd button is the U.S. Standard, DoD 5220.22-M Tripe Pass Wipe,
 - d. Once your choice is made the screen will go automatically to the next page.



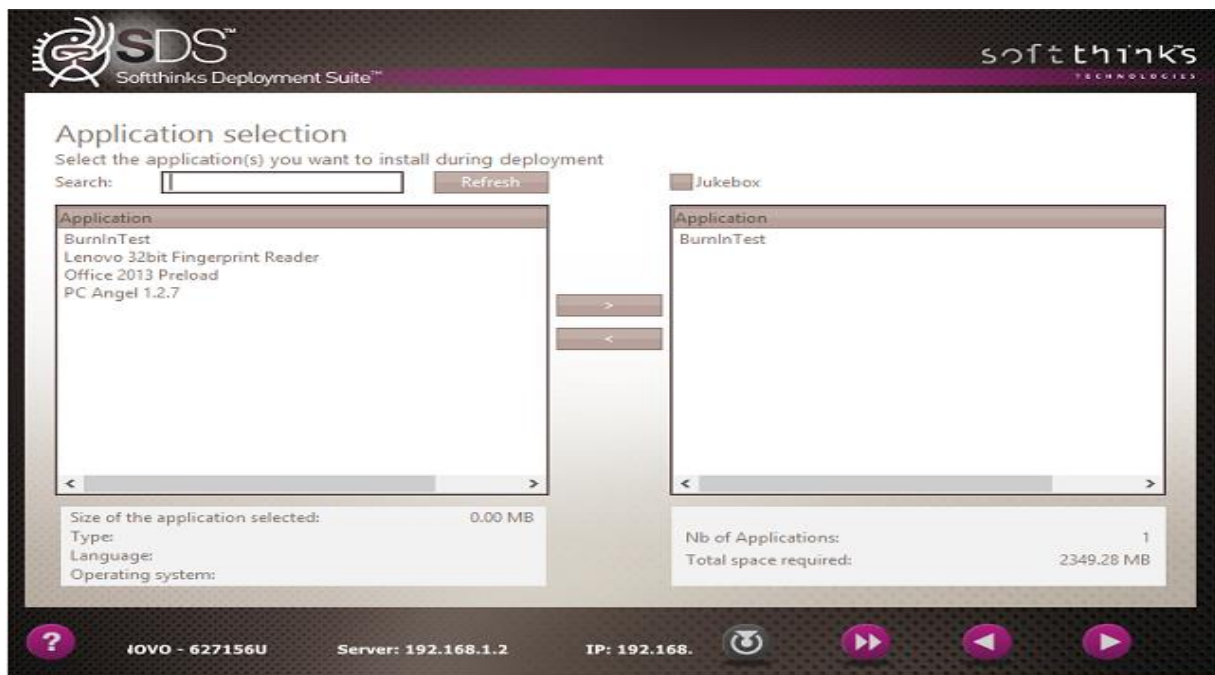
3. The next screen is where you select the Image you want to deploy onto the computer.
 - a. Click on the Image and then click the Right Arrow at the bottom (it will turn purple once a choice is made.)



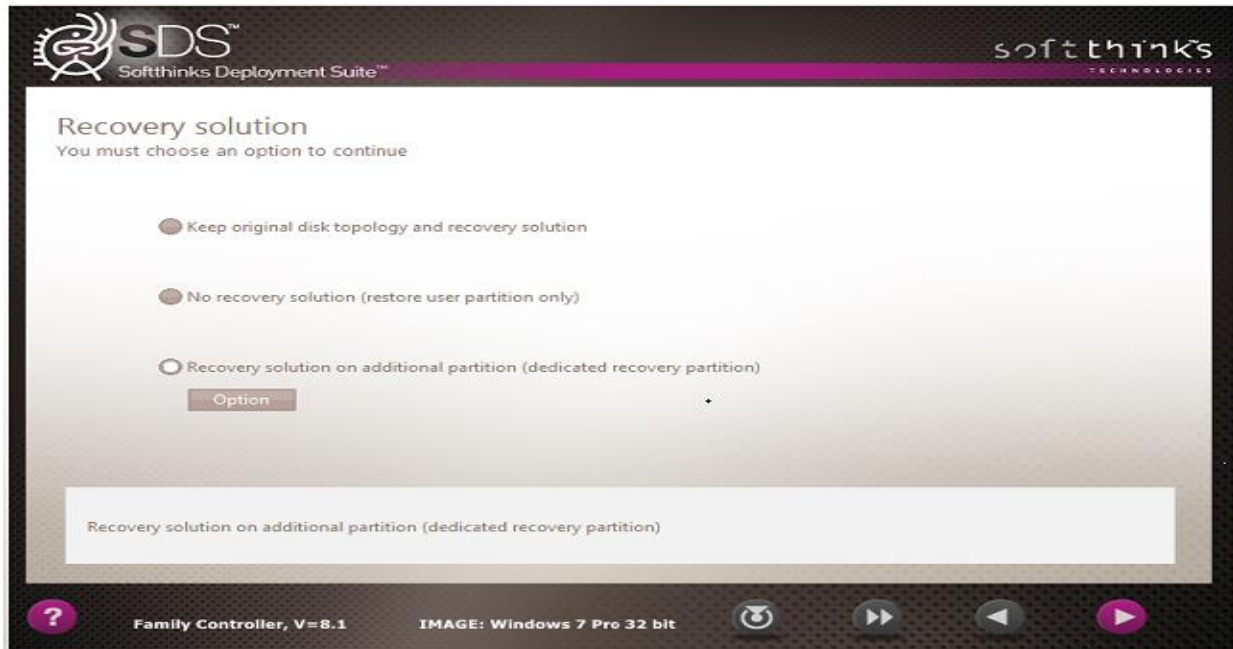
4. This next page is where you select any Applications that you want to deploy.
 - a. Applications in the left column are available to be installed.
 - b. Applications in the right column will be installed on the target computer
 - c. To select an Application to be installed, click on it in the left column and click on the right-facing arrow in the middle. It will move to the right column.
 - d. To deselect an Application, click on it in the right column and click on the left-facing arrow in the middle. It will move to the left column.
 - e. Once your choices are made, click on the Right Purple Arrow at the bottom.
 - f. If you do not want to install any Applications, make sure the right column is clear and then hit the



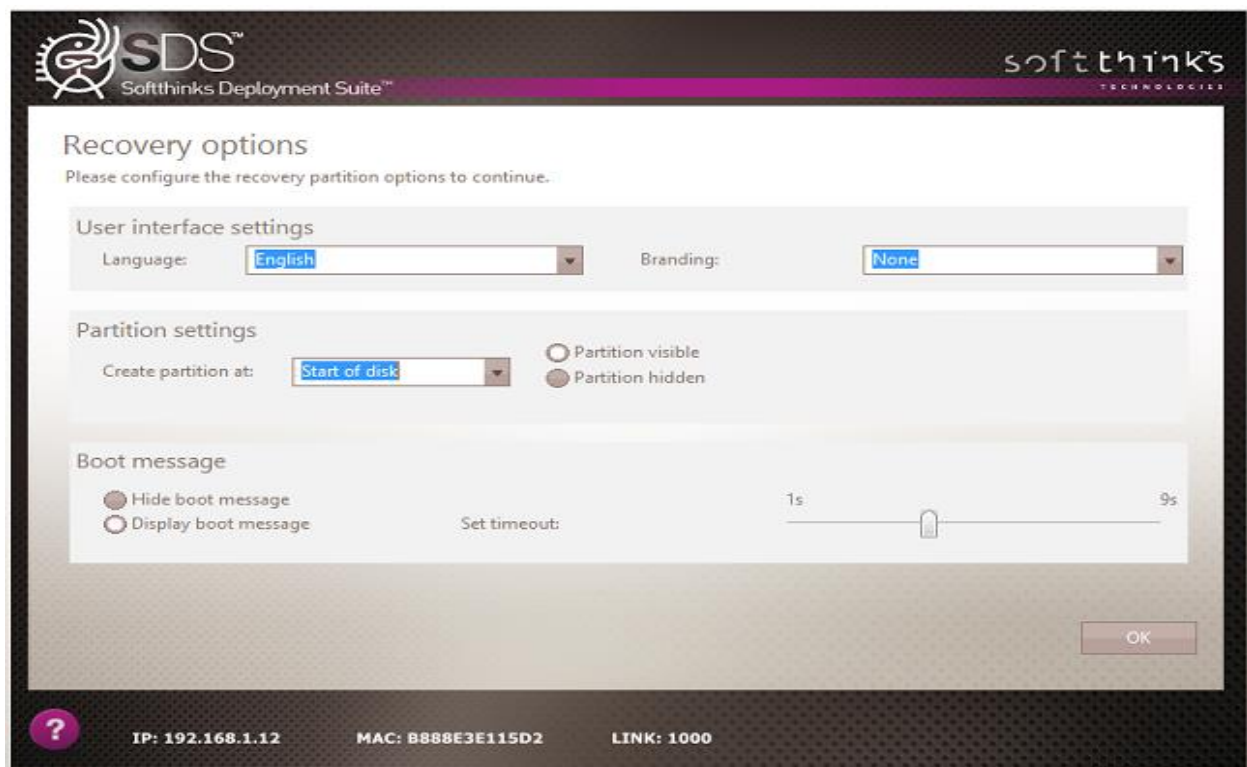
double-arrow at the bottom to move to the next screen.



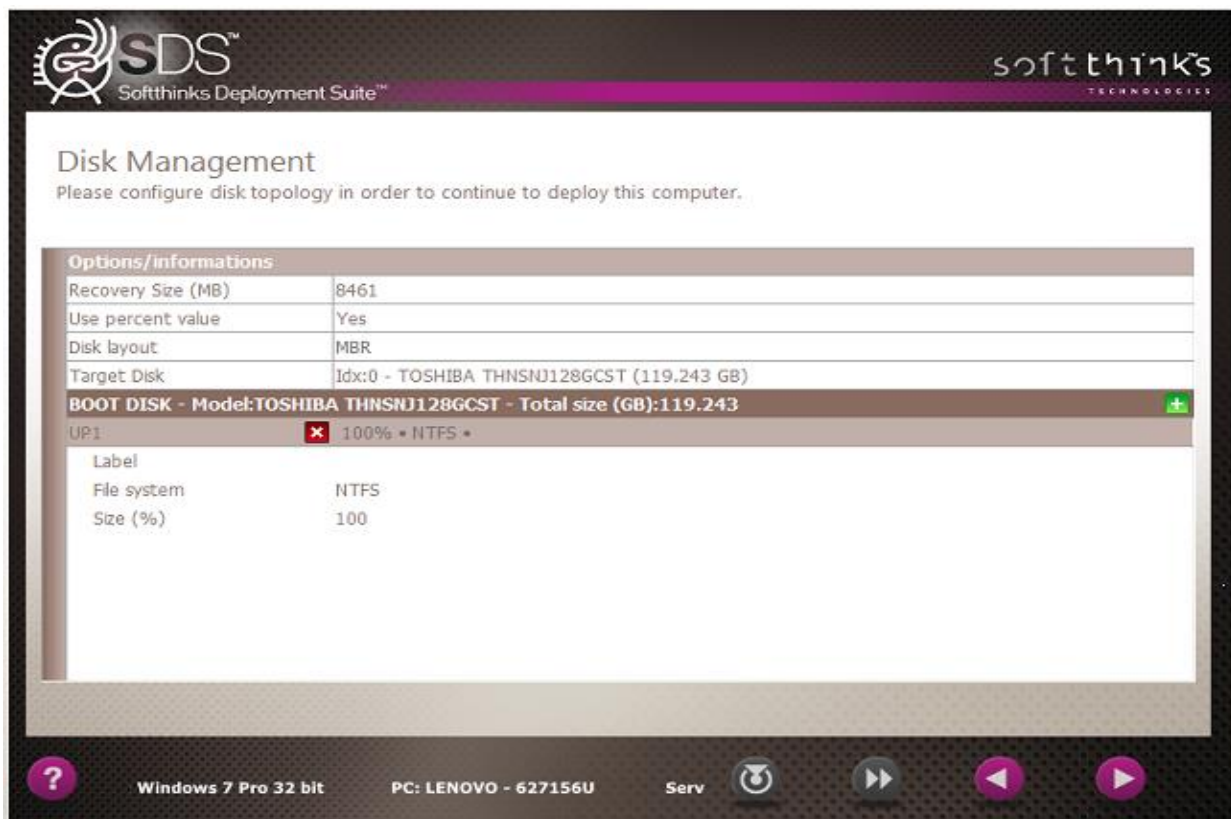
5. The next screen you will come to is where you choose the Recovery Solution.
 - a. For a Generic Image, select the Bottom (not allowed by MAR rules to not create a RP)
 - b. The top choice is for Static Images only.
 - c. If you select to create the Recovery Partition (RP) with a Windows 7 image you can click Option to choose where the RP will reside on the Drive and if it will be visible or not.
 - d. Windows 8 is set to End of disk and Hidden by default.



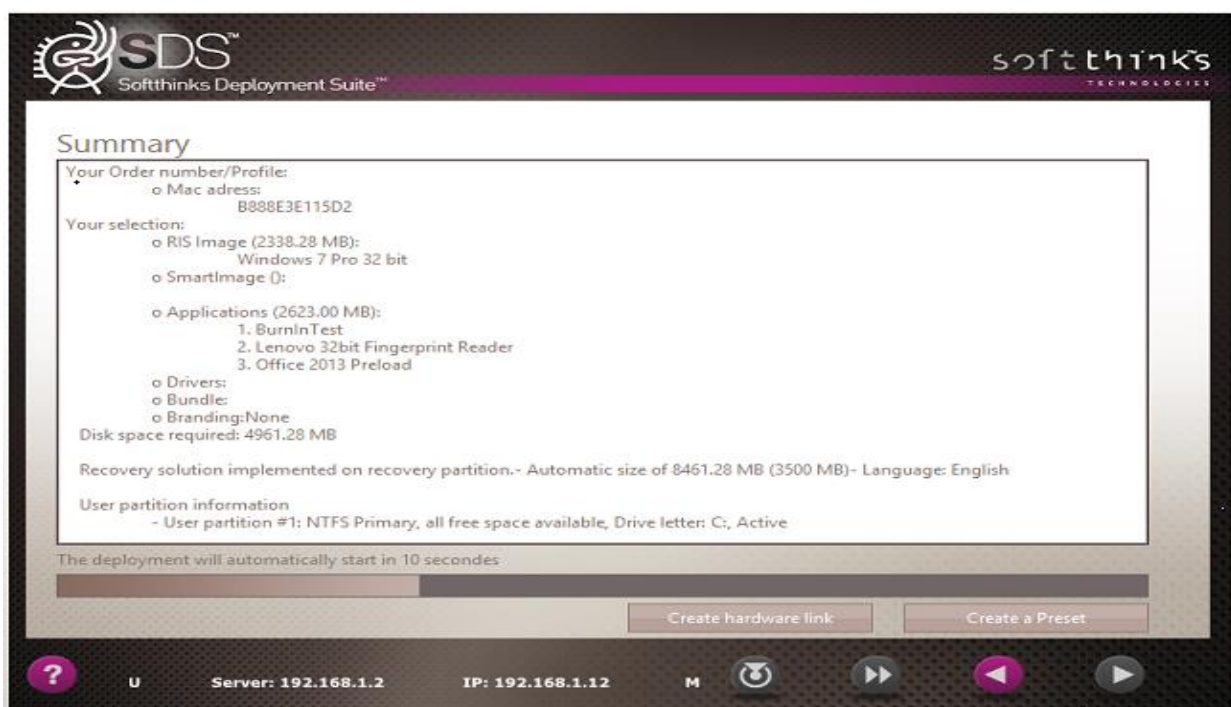
6. Windows 7 Deployments will have the Options button above. Clicking “Option” brings up this screen below. The default for Windows 7 is Start of disk and Visible. Change the Create Location first then change whether is it hidden or not after. Click OK once your choice is made and you will go back to the previous screen then click the Right Purple Arrow at the bottom.



7. The screen below will show you the partitions that will be created while imaging. If it looks good then click on the right purple arrow.



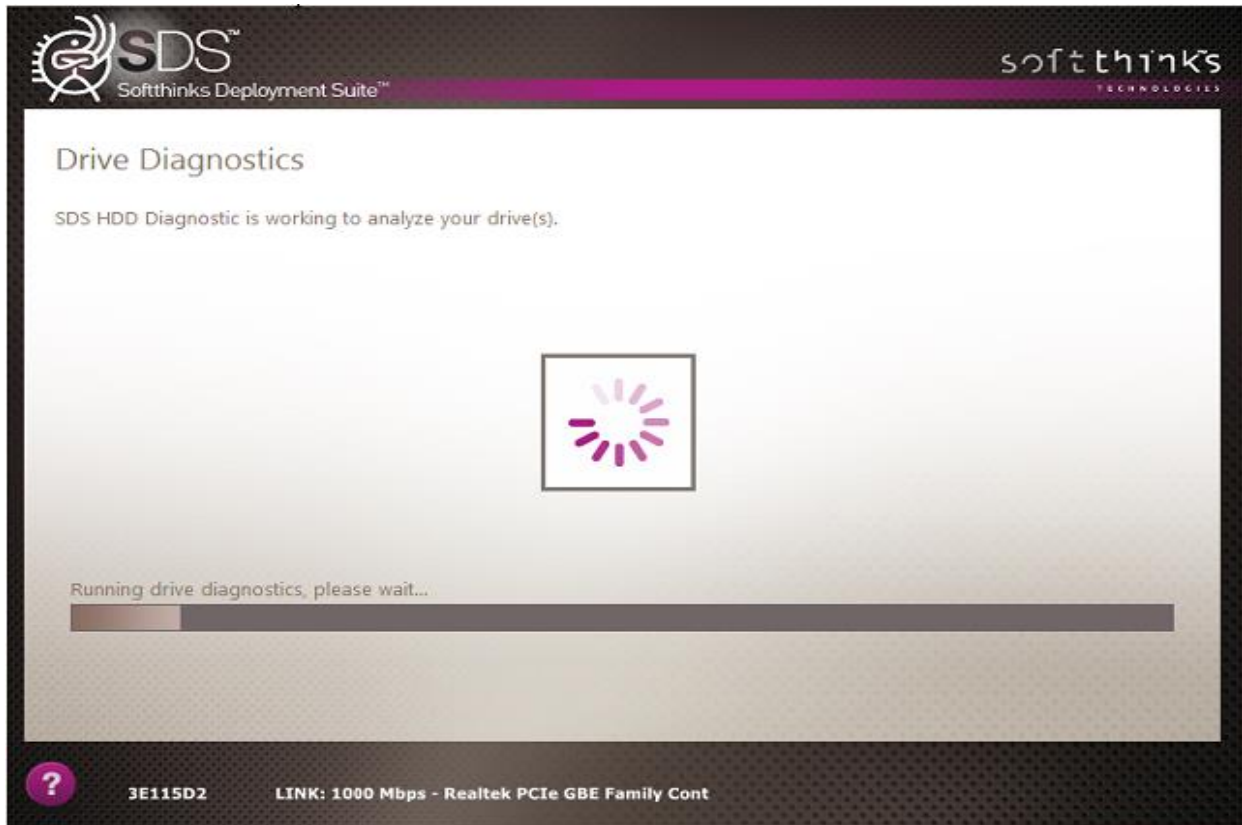
8. The final screen before the imaging process begins is the Summary. It will tell you the Image selected and any applications or other features that you selected to be added.
 - a. If anything is incorrect you can hover over the Left Purple Arrow and thumbnails of all the screens will show up. You can go back as far as you need to, but hurry as you only have 15 seconds to make your choice or it will advance to the next screen.



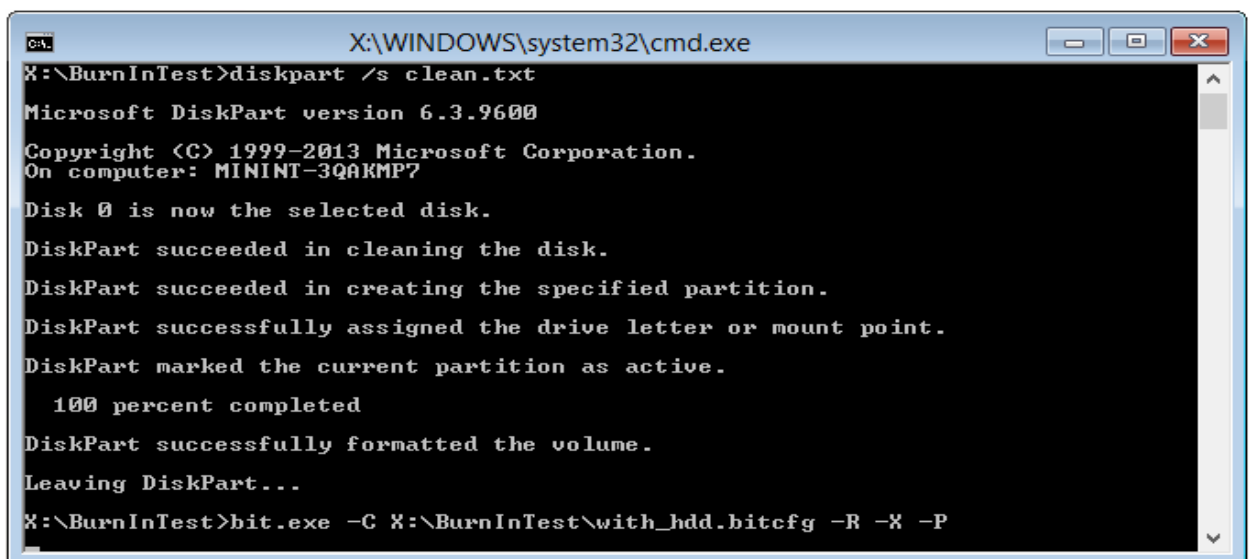
C) Deployment Flow

1. Hardware Precheck.

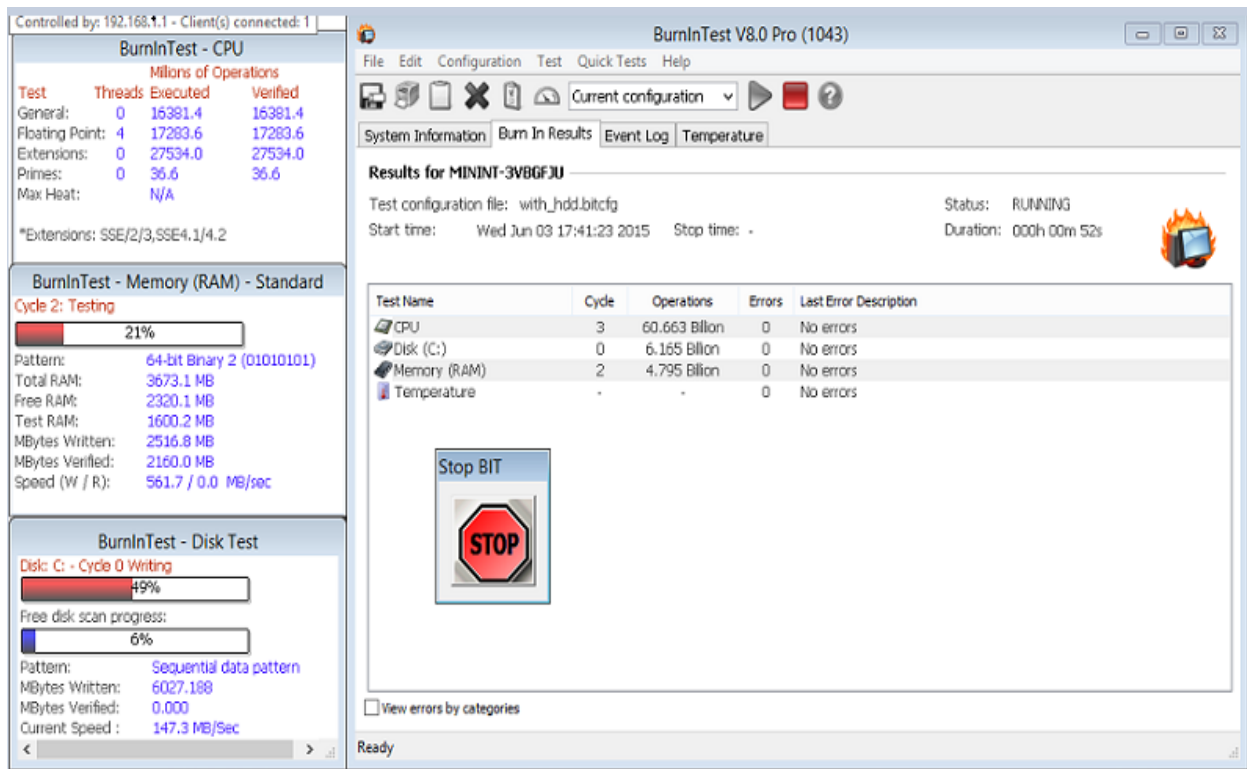
- a. If you selected Hardware precheck in the selection screen, the first screen to appear will be the SMART Test of the hard drives. If any errors are detected the deployment process will stop immediately and tell you what the issue is. The problem will have to be repaired and the computer will have to be re-PXE booted for the process to advance past this point.



- b. If SMART Testing is successful then the WinPE Hardware Pre-check will commence.
 - i. The first step is for the Clean.cmd to run. This will select only the Hard Drive in the computer, perform a clean of the drive and set the Drive Letter to C: . The reason for this is to prevent the RAM from being detected as a HDD device and having the testing fail because it doesn't have enough space for the testing. (Remember, all of the WinPE and SDS software is loaded to the memory of the computer.)



- ii. After the Clean is finished, the Full Hardware Pre-check will begin.



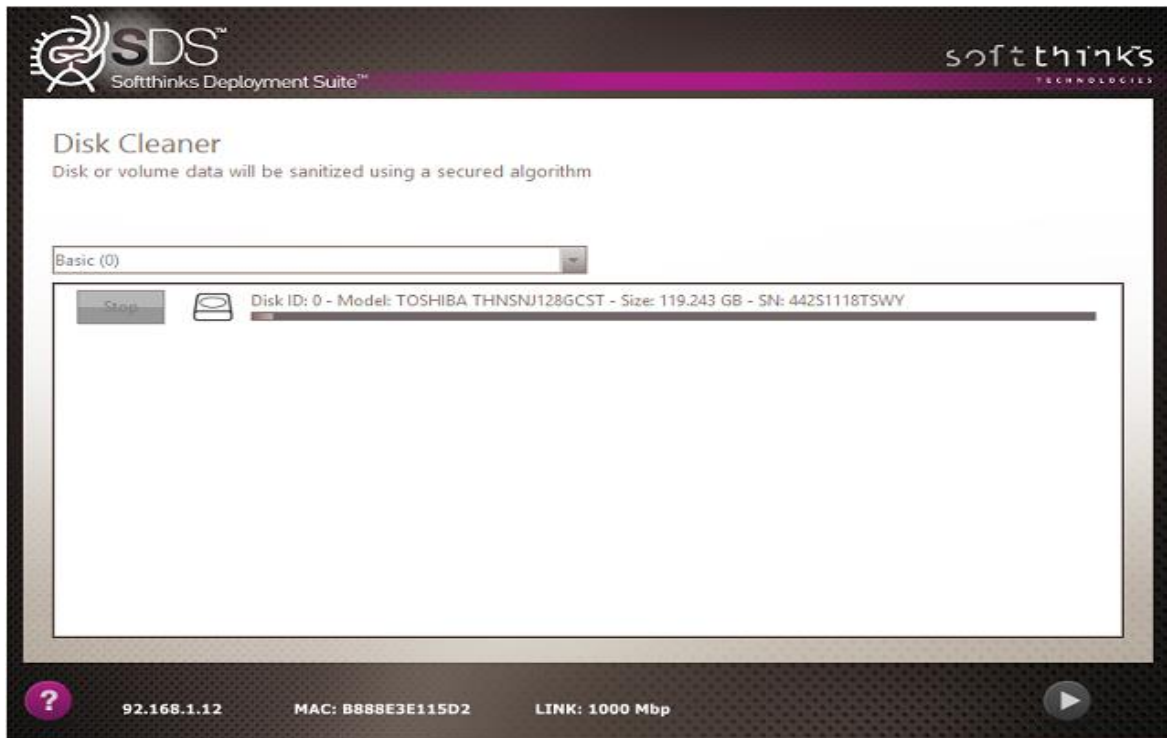
- iii. If the testing is successful you will see the page below.



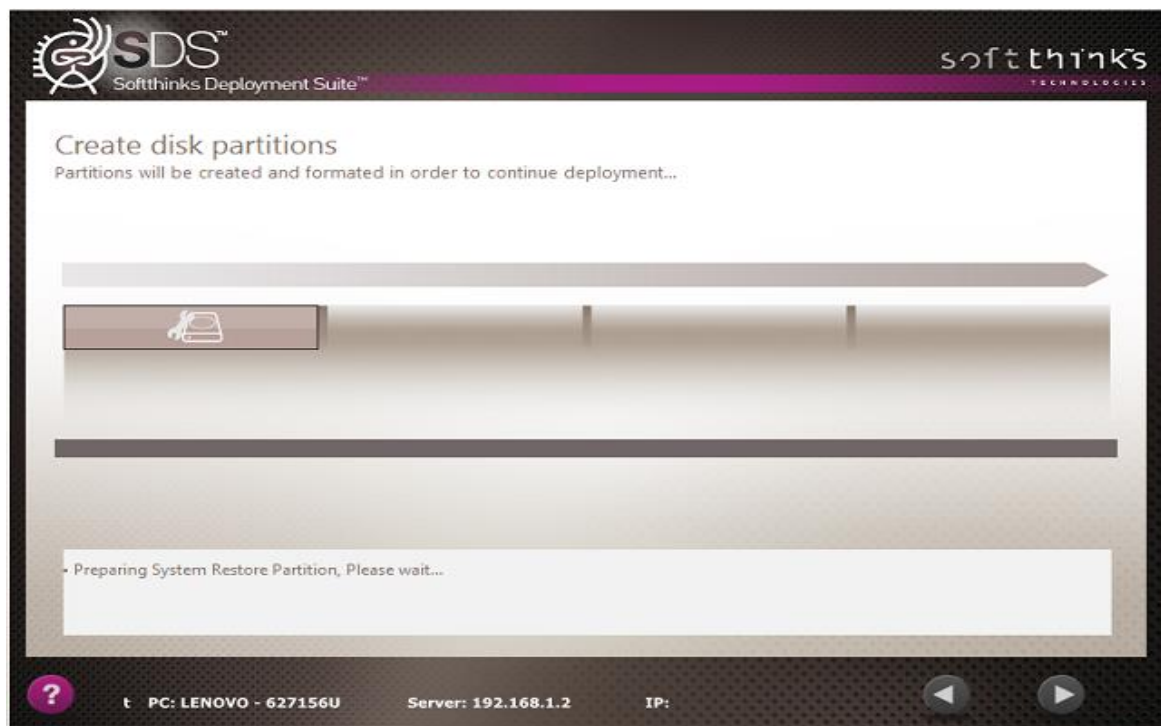
- iv. If any component failed the testing the green symbol above would be red and there would be a blinking FAIL message. Scrolling down in the Precheck Report will tell you what components failed the testing. The computer can be re-PXE booted to the server once the bad component is replaced and the deployment process will have to be restarted from the beginning.

D) Disk Wiping

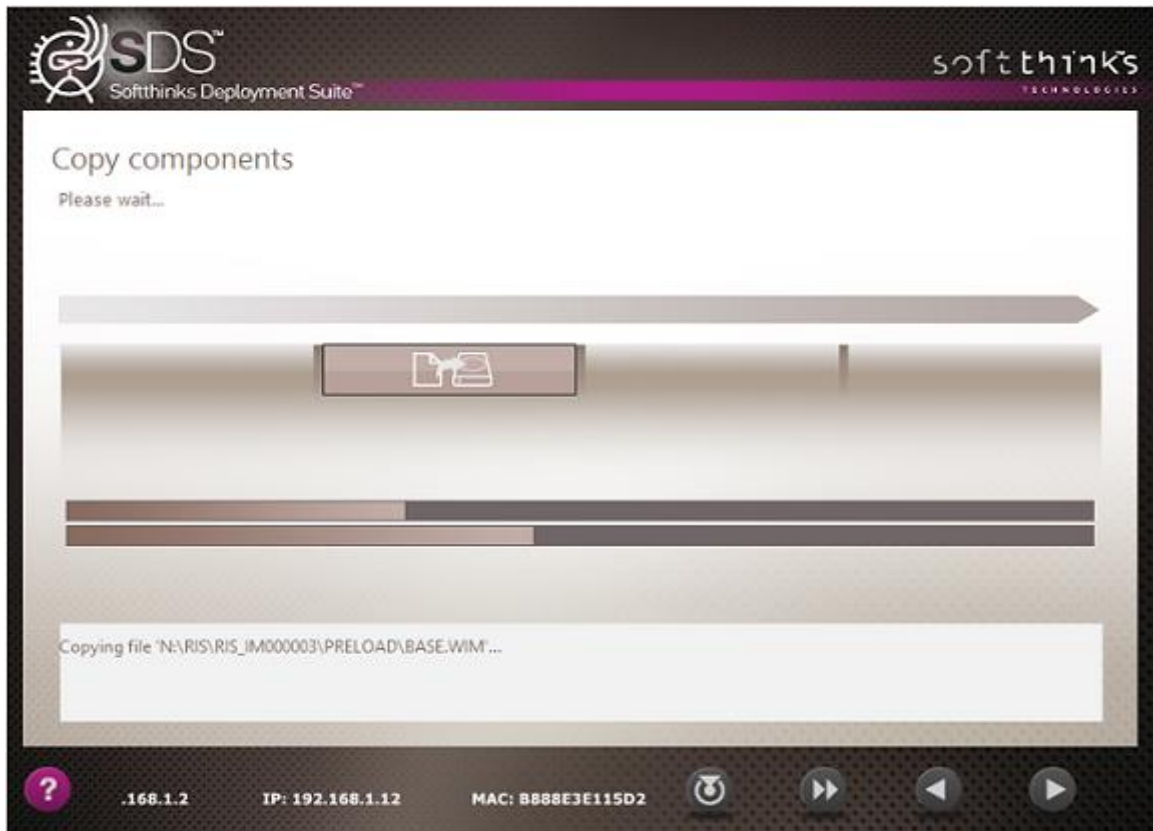
- a. If you selected to wipe the drive and the pre-check testing passed successfully then the Disk Wiping will start automatically.
 - i. If you selected HDD Wipe – Basic it will say Basic (0) in the text box below. This is the ADISA certified SoftThinks Single-Pass wipe.
 - ii. If you selected HDD Wipe – DOD, then it would say U.S. Standard, DoD 5220.22-M. This is the US DOD Triple-Pass wipe.



2. After the wipe is complete the actual imaging process will begin. Based on your choices, the HDD will be formatted and the partitions will be created.



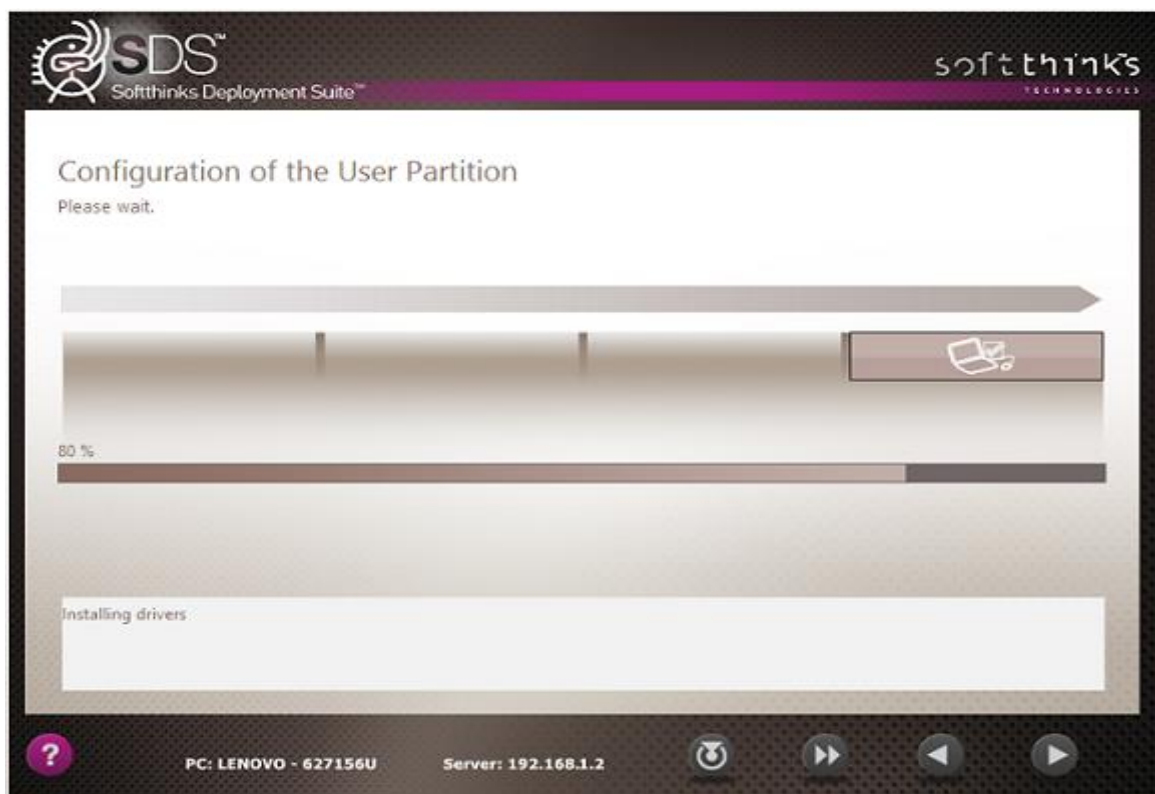
3. The next phase is when the image is downloaded to the destination computer.
 - a. If there is a Recovery Partition (RP) then the image will be downloaded there.
 - b. If there is no RP then image will be downloaded to a Temp Folder on the User Partition (UP).



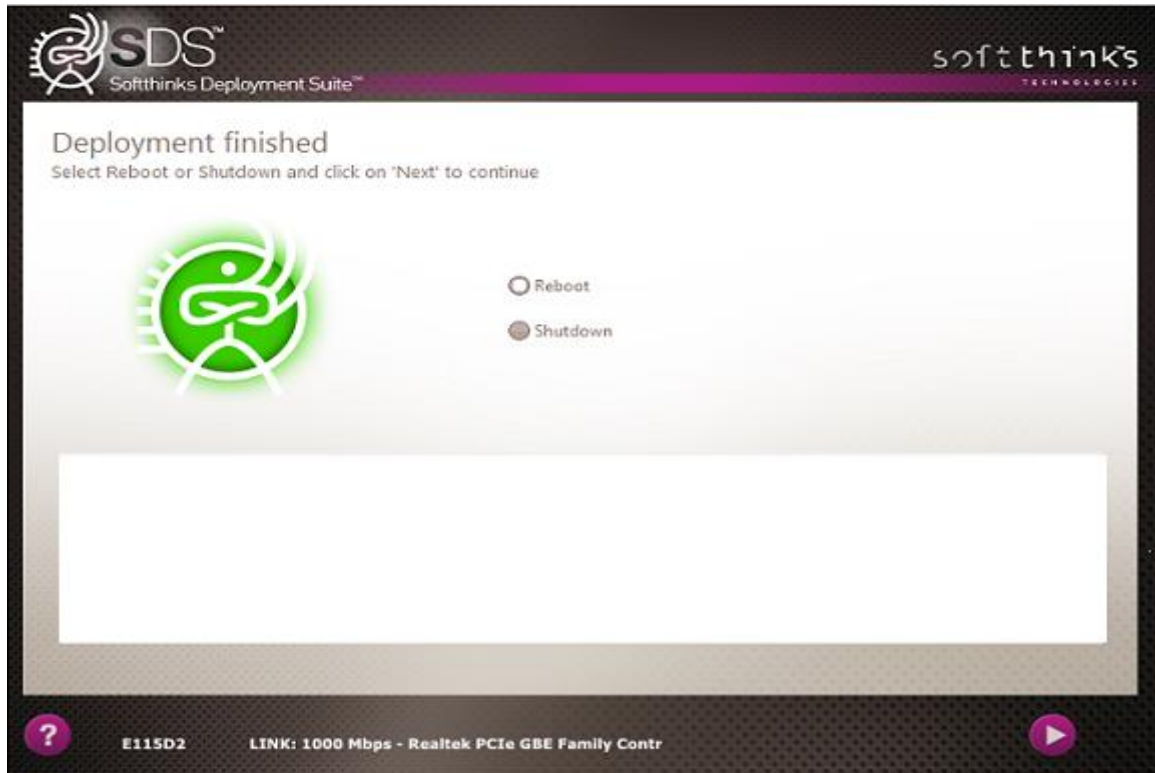
4. After the image is downloaded it will then be decompressed to User and System Partitions as required.



5. The last part of the deployment process is where the drivers are downloaded from the server. This is also where any applications that were selected are copied to the computer, and also MBR is created at this point.

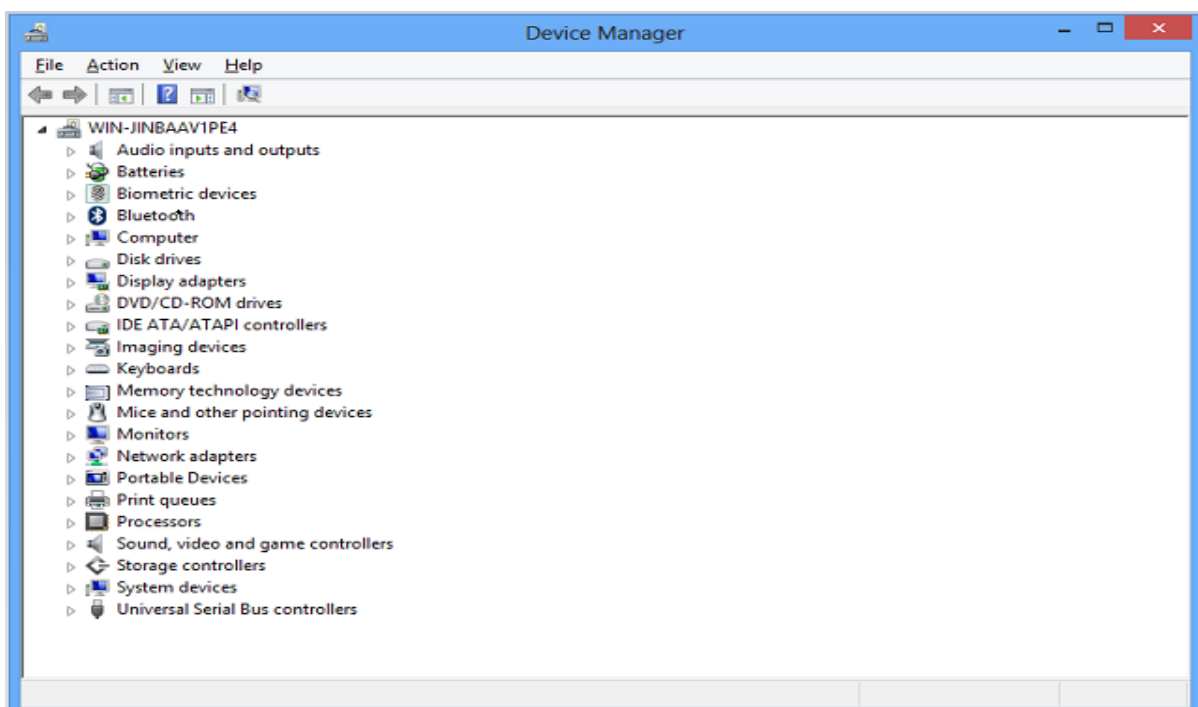


6. If the imaging process was successful you will see the page below with the green symbol. If any part of the process failed, then the symbol would be red with an explanation in the white box below it. All part of the run are saved in the Log in the Temp folder in SDKDB. These can be pulled and sent if there is ever an issue.

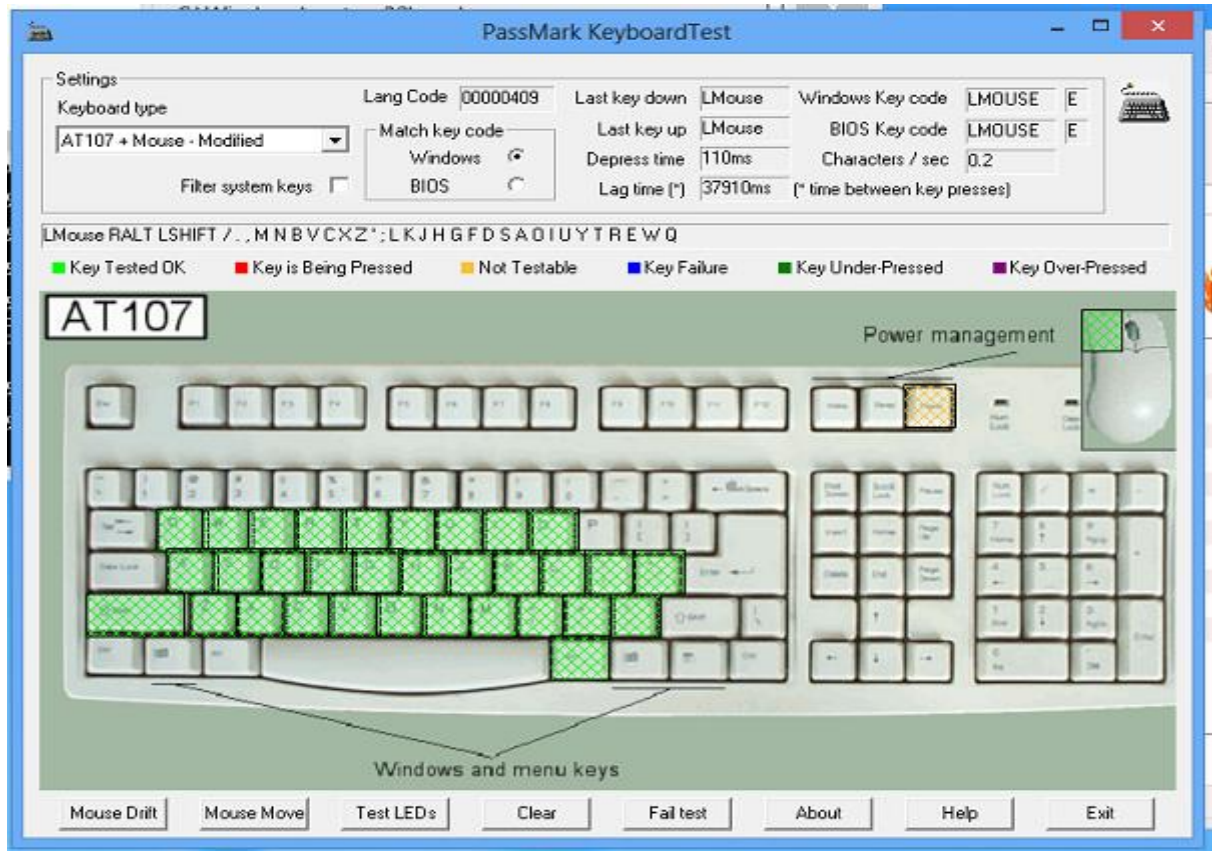


E) Windows Start-up and Post-Imaging Windows Extended Testing

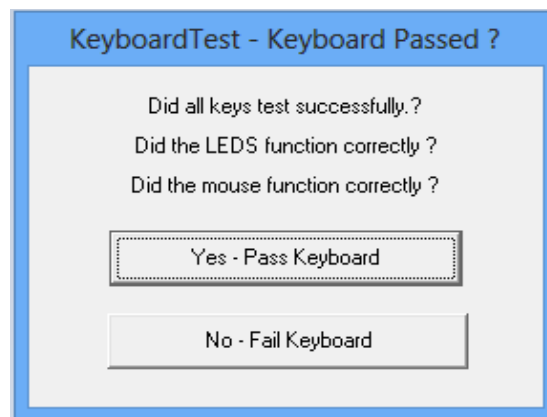
1. After the computer is rebooted, Windows will go through its normal steps of setting up. It may reboot a few times as it installs the devices. The computer will eventually boot up to Audit Mode.
2. The Post-Imaging Windows Extended Testing will begin immediately with the Device Manager open to show you if all the drivers have been installed. If any were missing, there would be an "!" in front of the device or it would say unknown device.



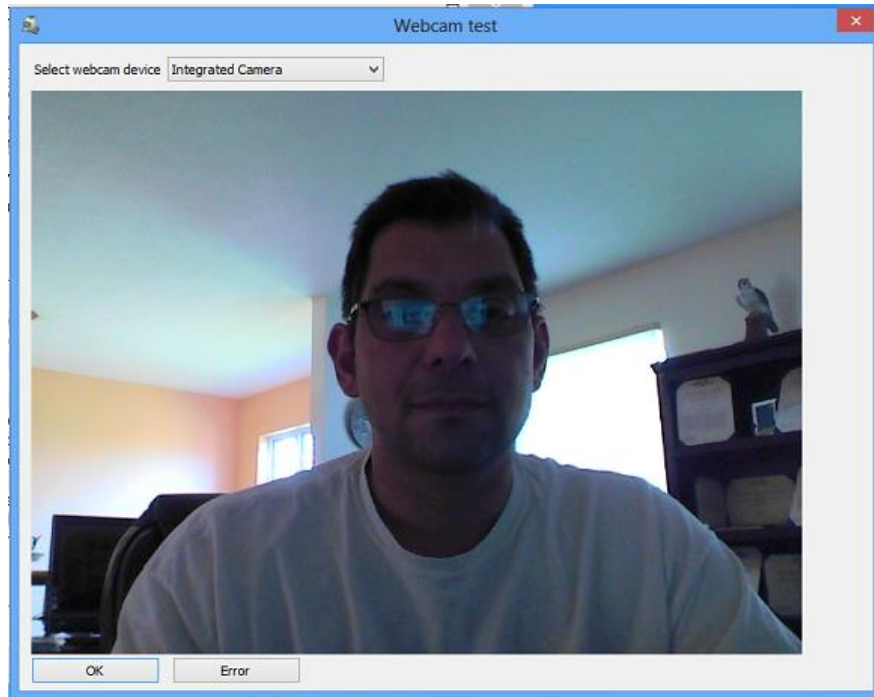
3. The Keyboard Test will open up next along with BurnInTest.
 - a. Press all of the keys on the keyboard and then hit Exit at the bottom.



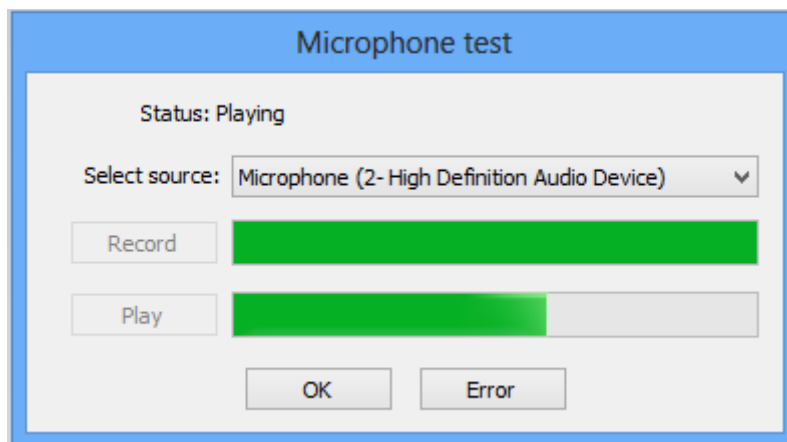
- b. The screen below will open up. If all of the keys lit up when the key was pressed, then select Yes-Pass Keyboard.



4. After the Keyboard test is complete, then the webcam will open. If it opens and you see yourself in the display then Click OK.



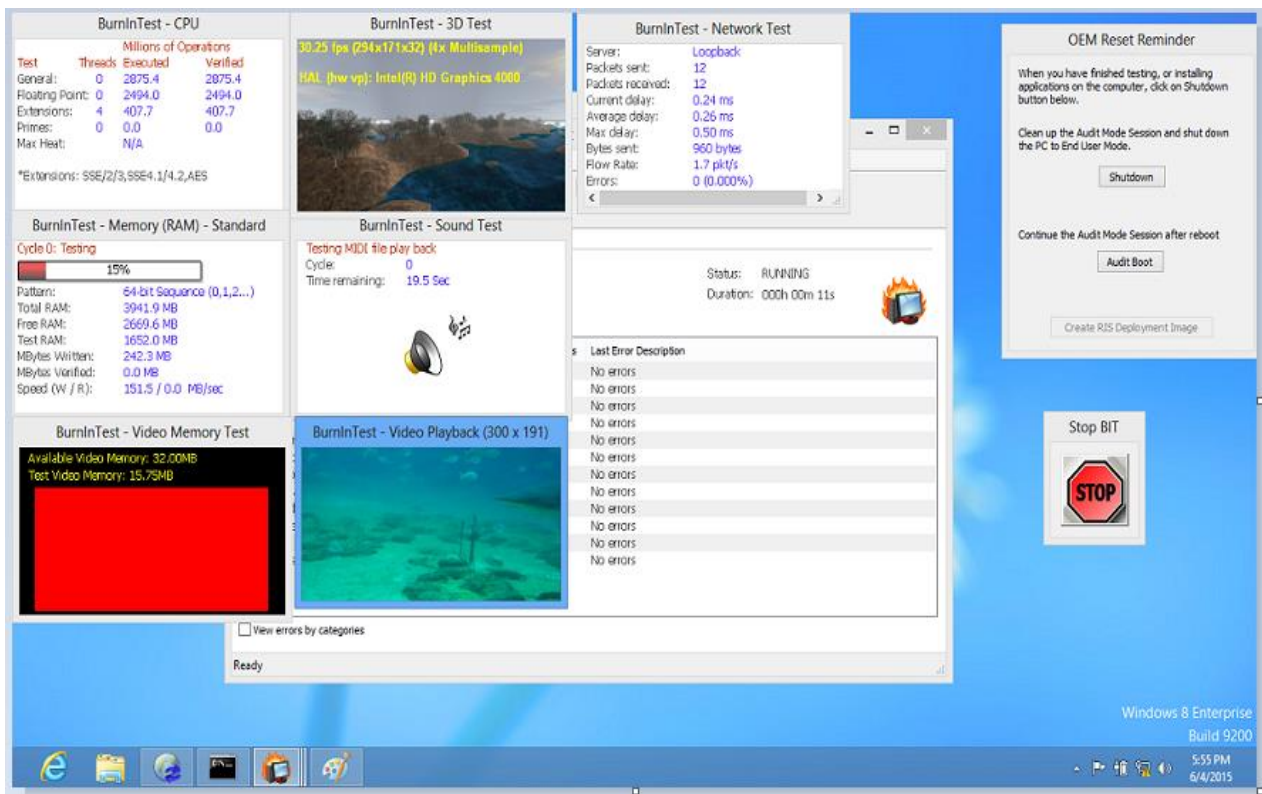
5. The next test to open if it was selected is the Microphone.
 - a. Press Record and say any phrase you want.
 - b. Press Play and if you hear the phrase, click OK.



6. If selected, the Battery Test will open next. This will just flash open and then close without any technician interaction.



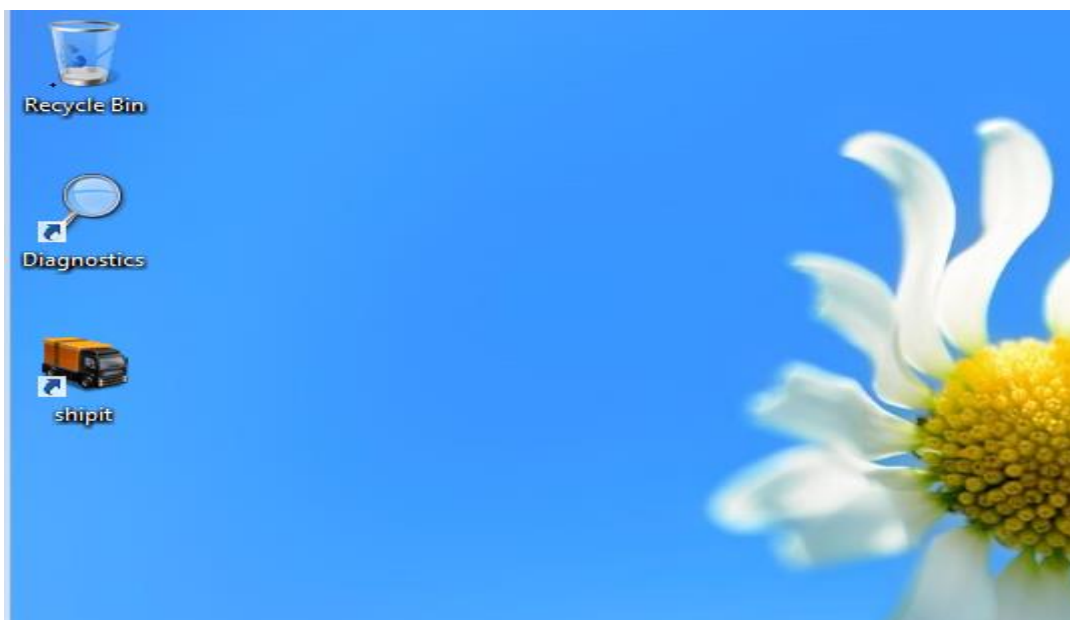
- After the Battery Testing is complete then all of the other tests that you selected to run will open and run simultaneously without user interaction. These tests will run for as long as you selected them to run for in the Hardware Configuration page.



8. If all of the tests pass then a Green “Pass” box will flash on the screen. If any tests failed then a Red “Fail” box will Flash on the screen. The component(s) that failed will be listed in the Report on the screen and all results (Pass or Fail) will be sent to the Reports folder on the server.

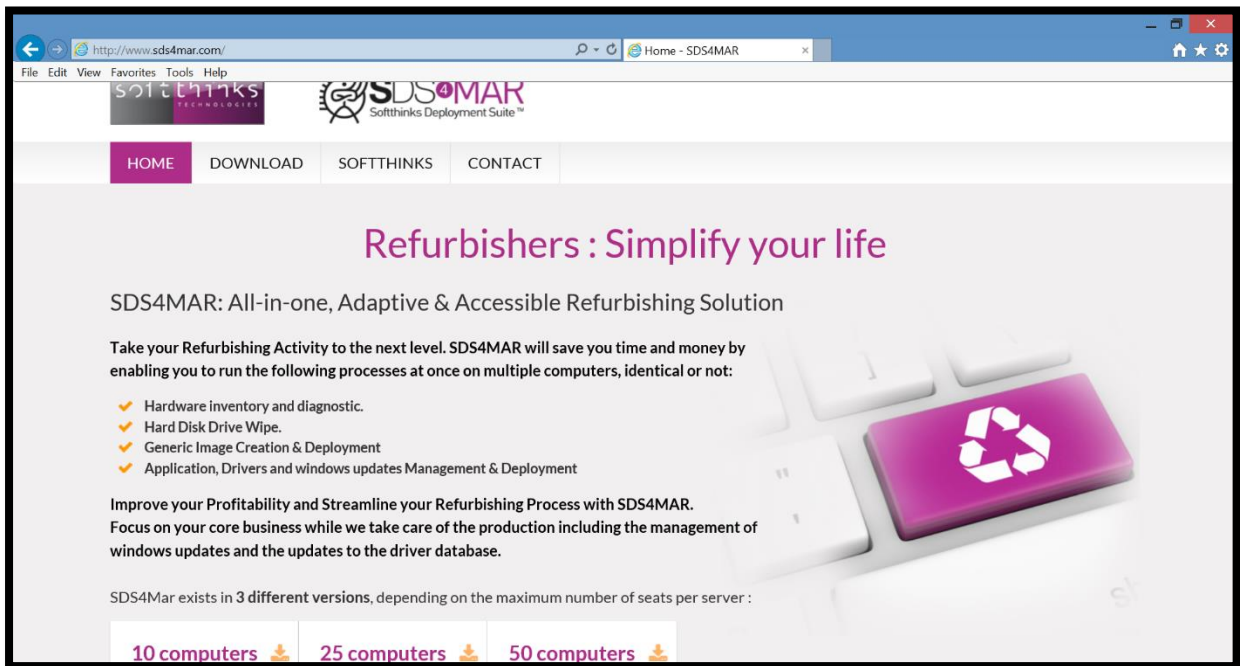


9. The Windows can be closed and then double-click on the “shipit” icon on the desktop. This will clean the testing software off of the computer, run Sysprep without Generalize checked and shut the computer down. The next time it is booted it will come up into the Out of the Box Experience (OOBE mode) and look like a new computer to the customer.

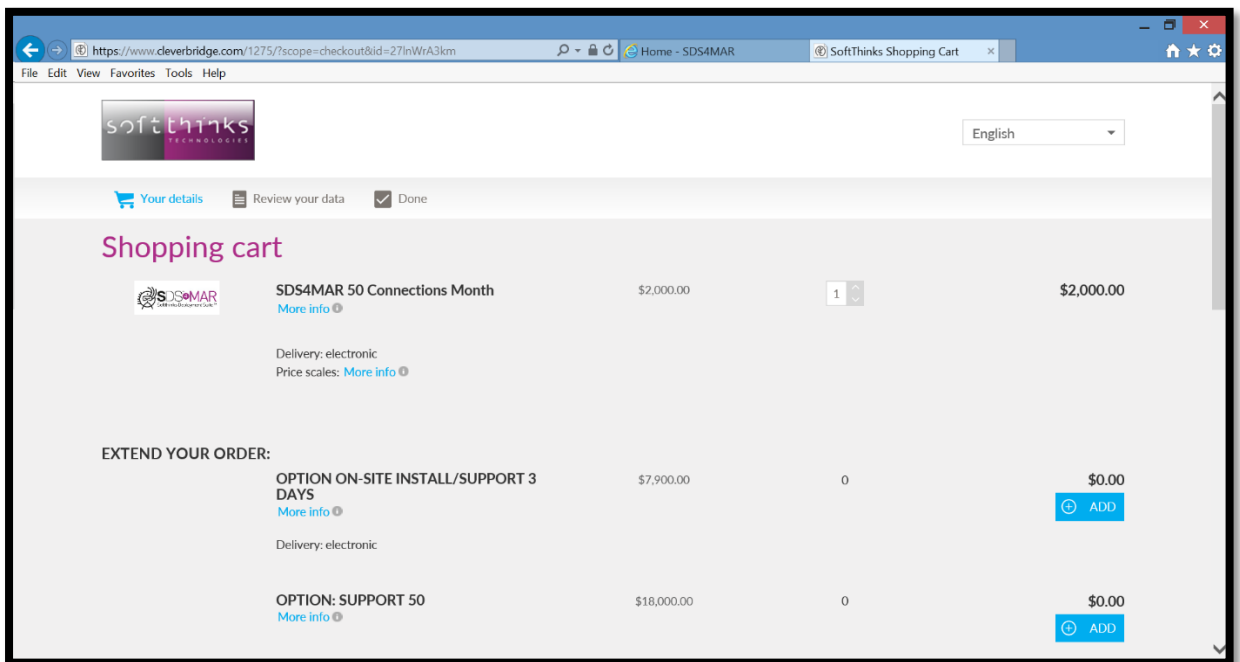


VII) Buy & Renew Licenses

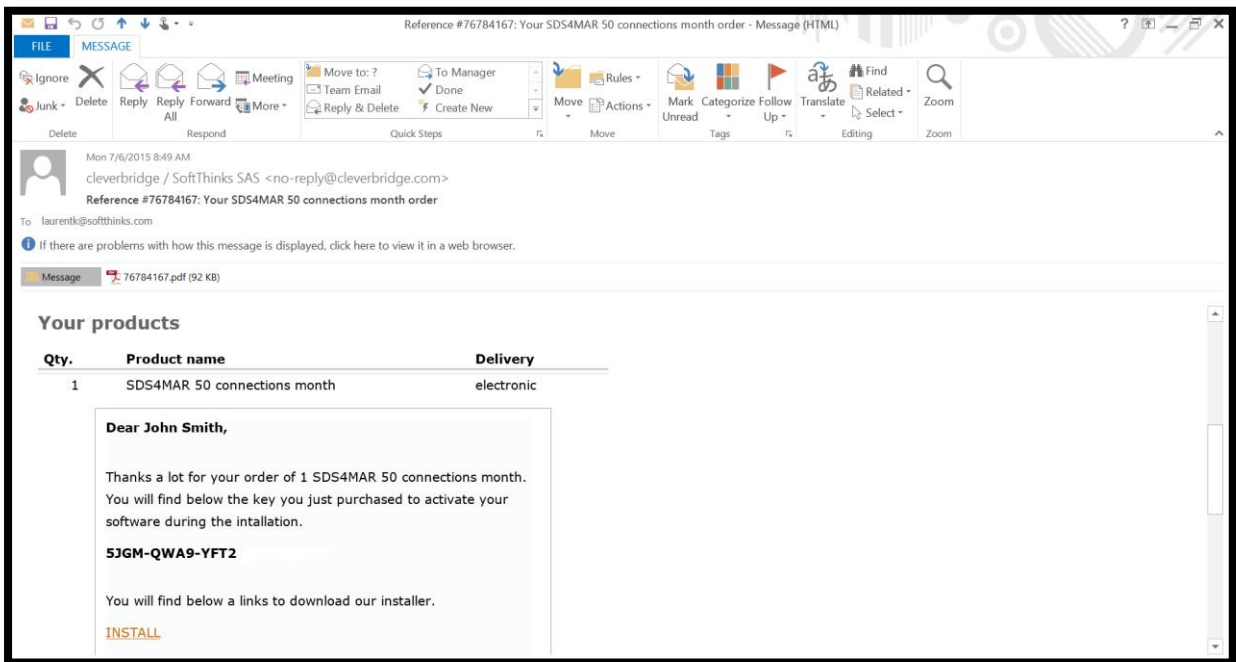
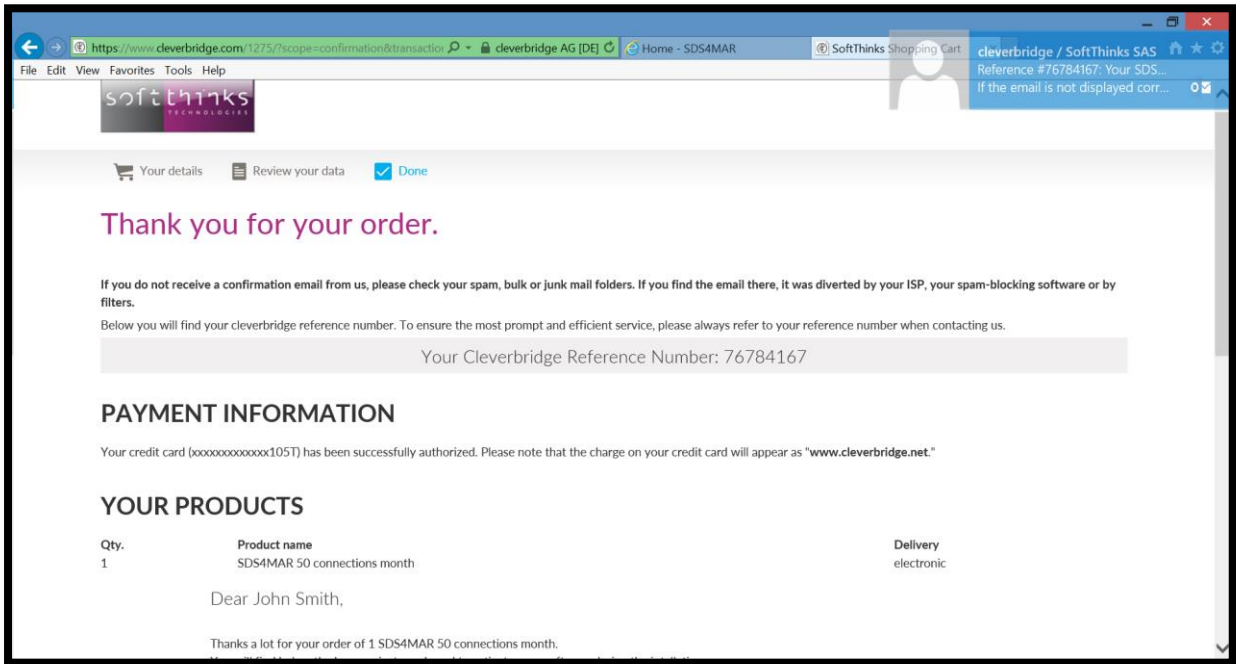
Please go to www.sds4mar.com



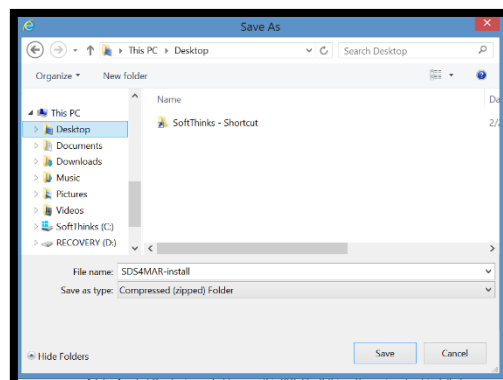
Select your configuration: 10, 25 or 50 seats per server

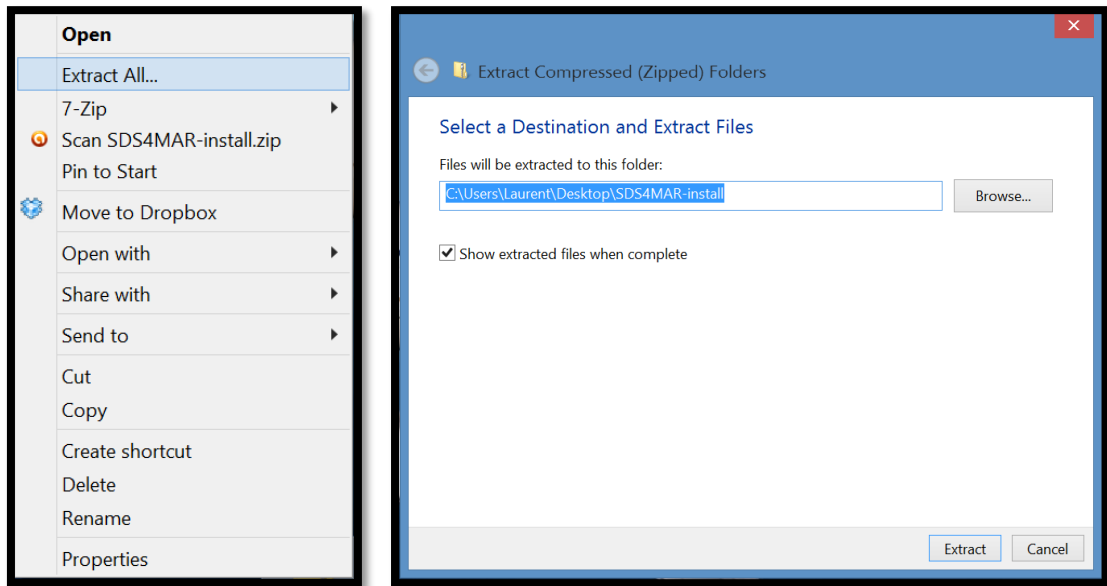


Choose the number of months and any applicable options you would like to purchase and enter your credit card information. Upon validation, you will be taken to the confirmation page and will receive shortly an email from us. If you don't receive this email, please check your spam folder.

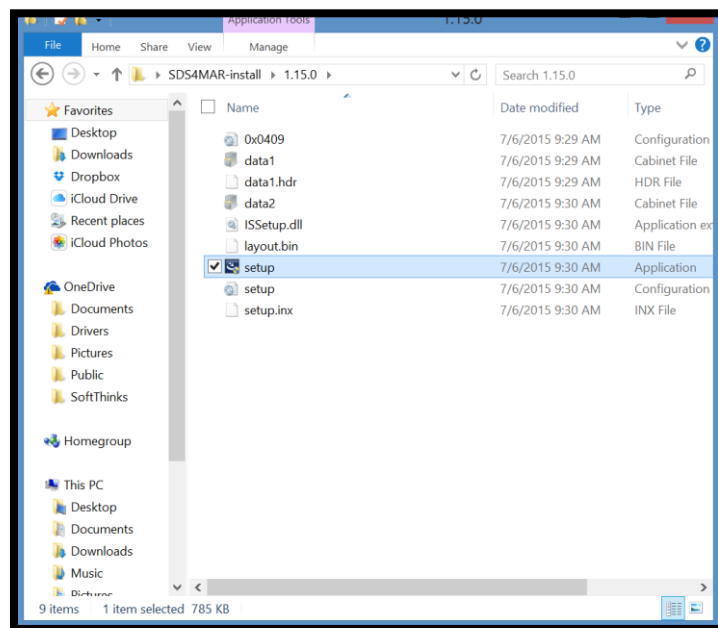


The email will include your receipts as an attachment, your activation code and a link to download our software installer. Click on that link and save the file as prompted:

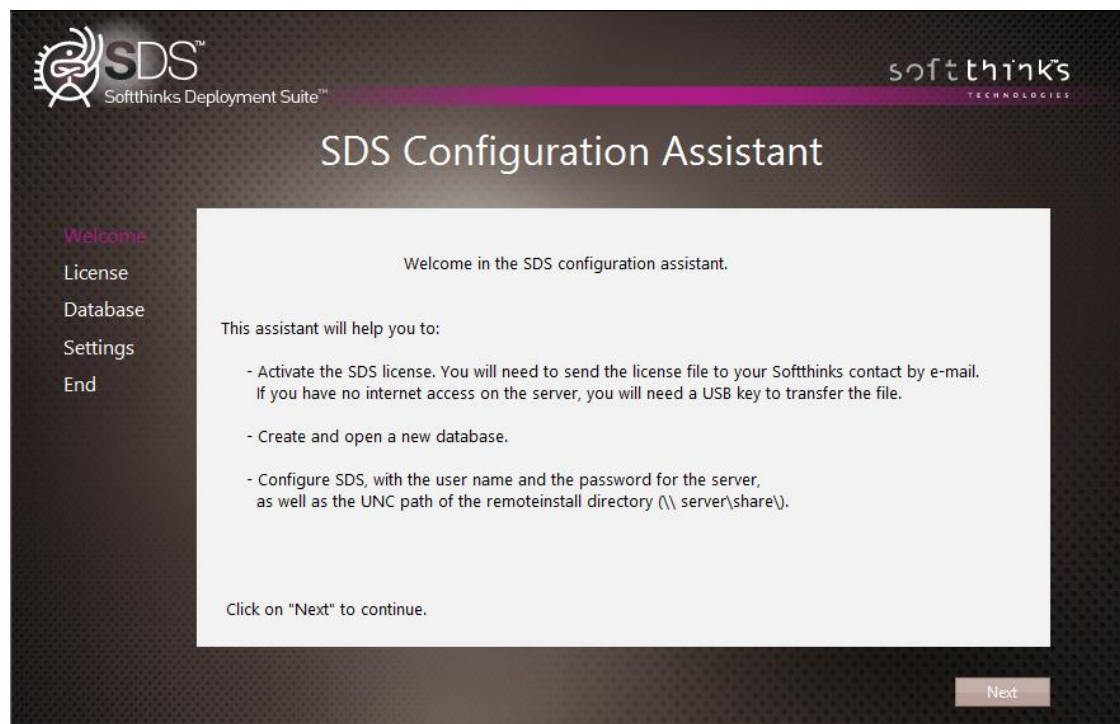
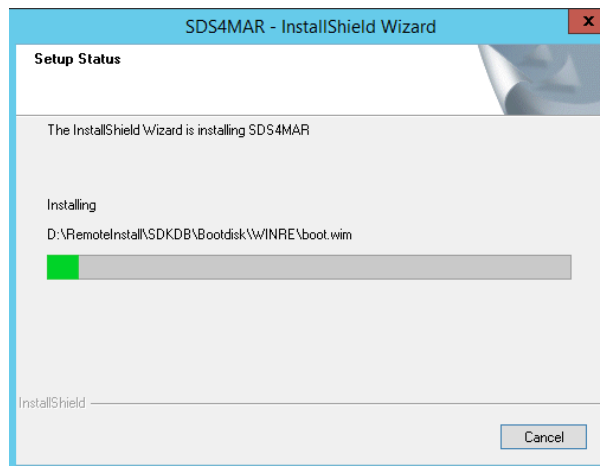
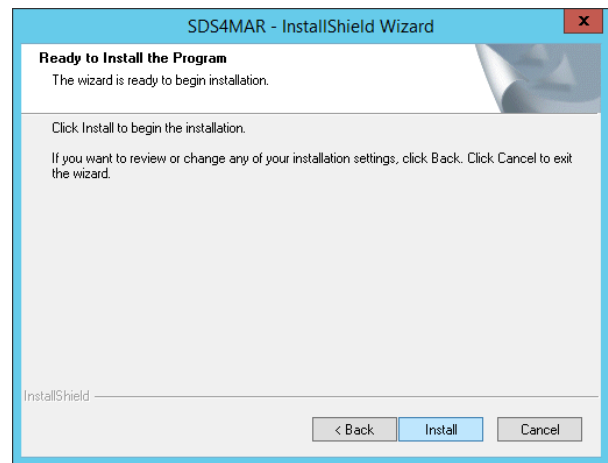
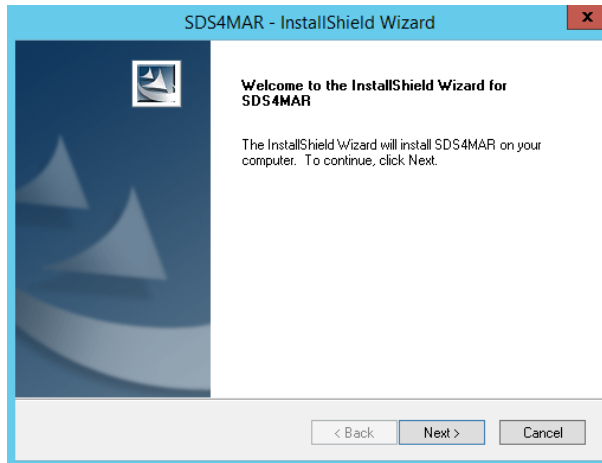




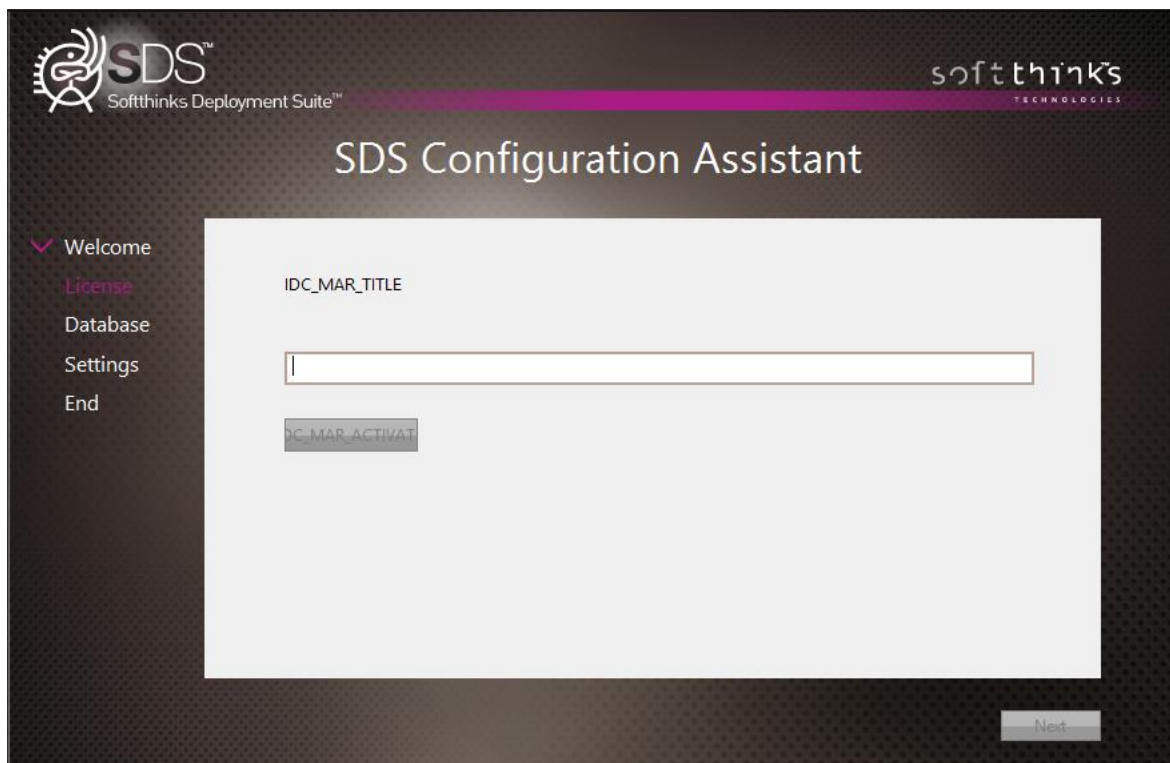
Right click on the downloaded file and choose extract all, then press Extract. This will create a folder called SDS4MAR-install.



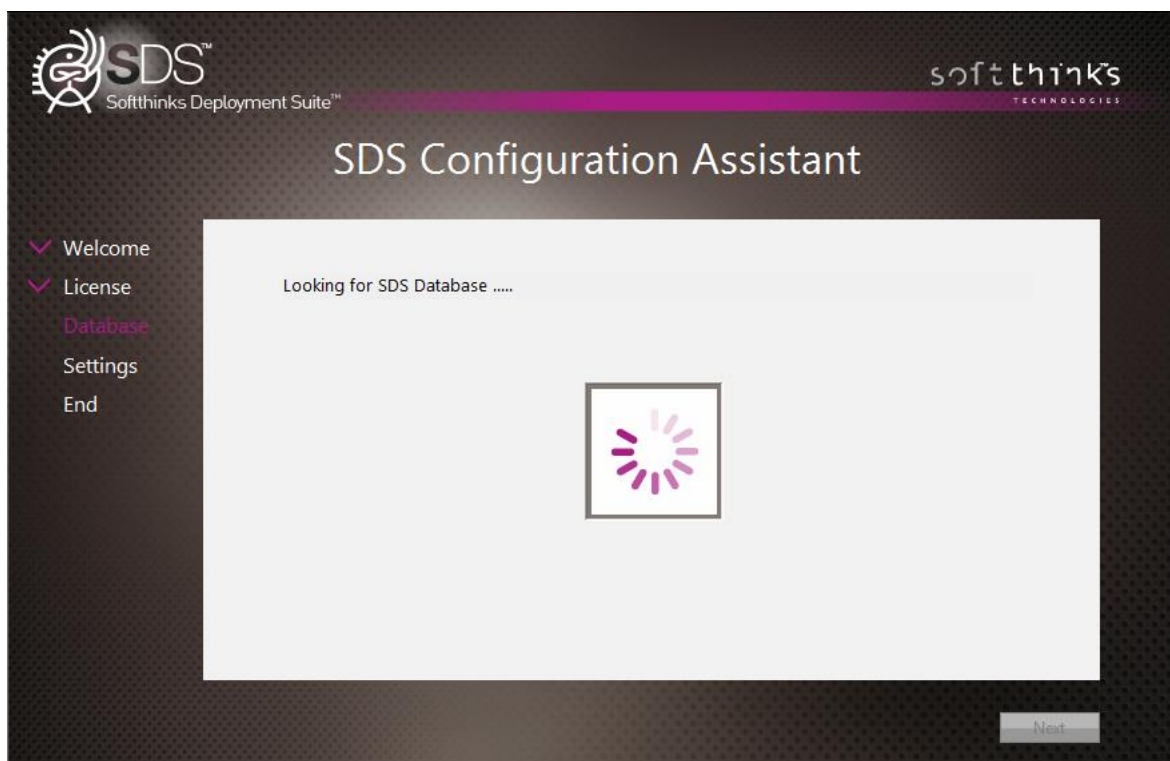
In that folder enter 1.15.0 folder and click on setup.

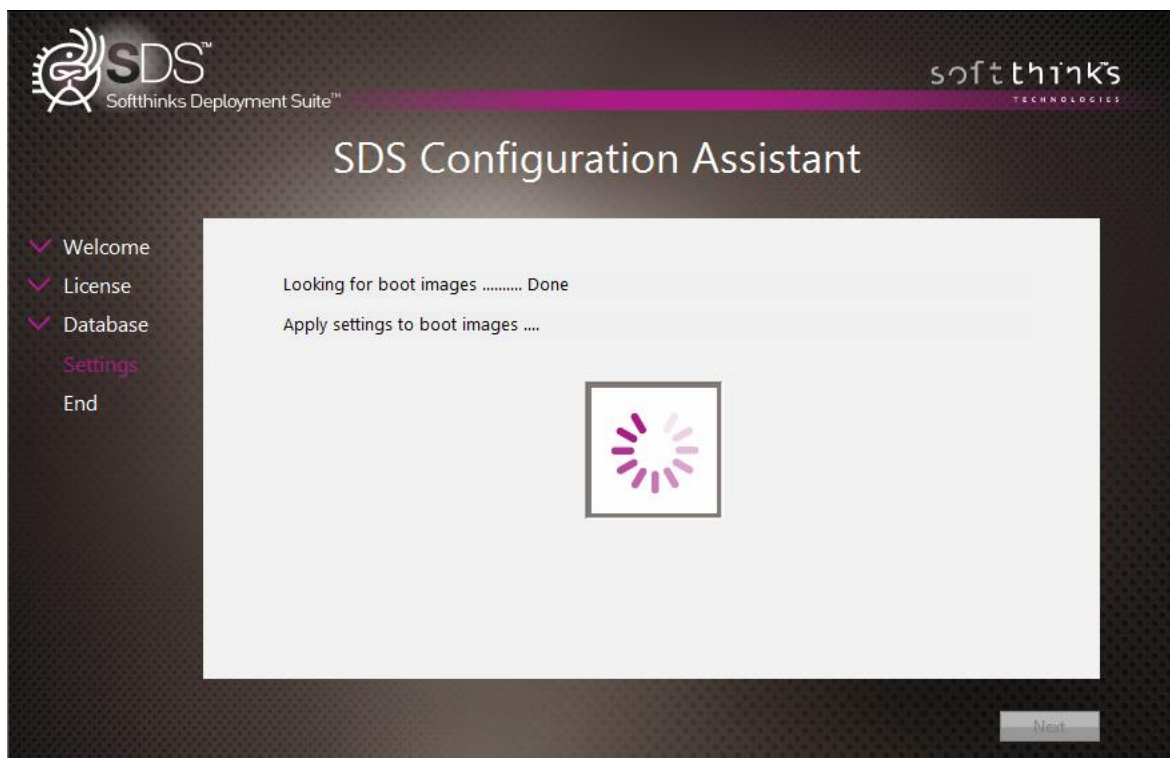
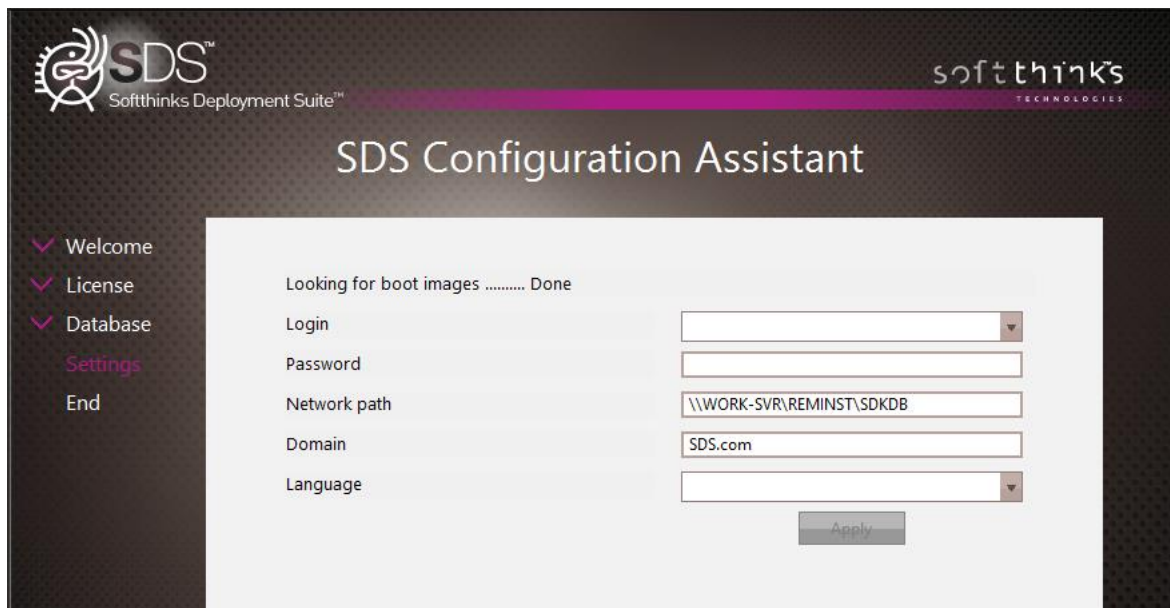


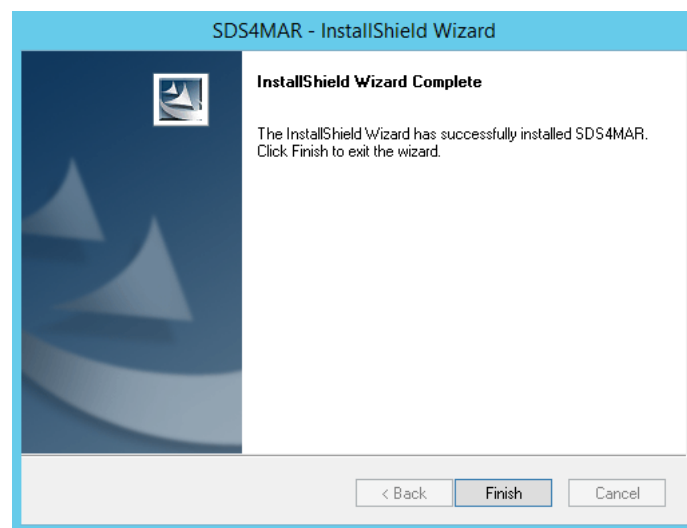
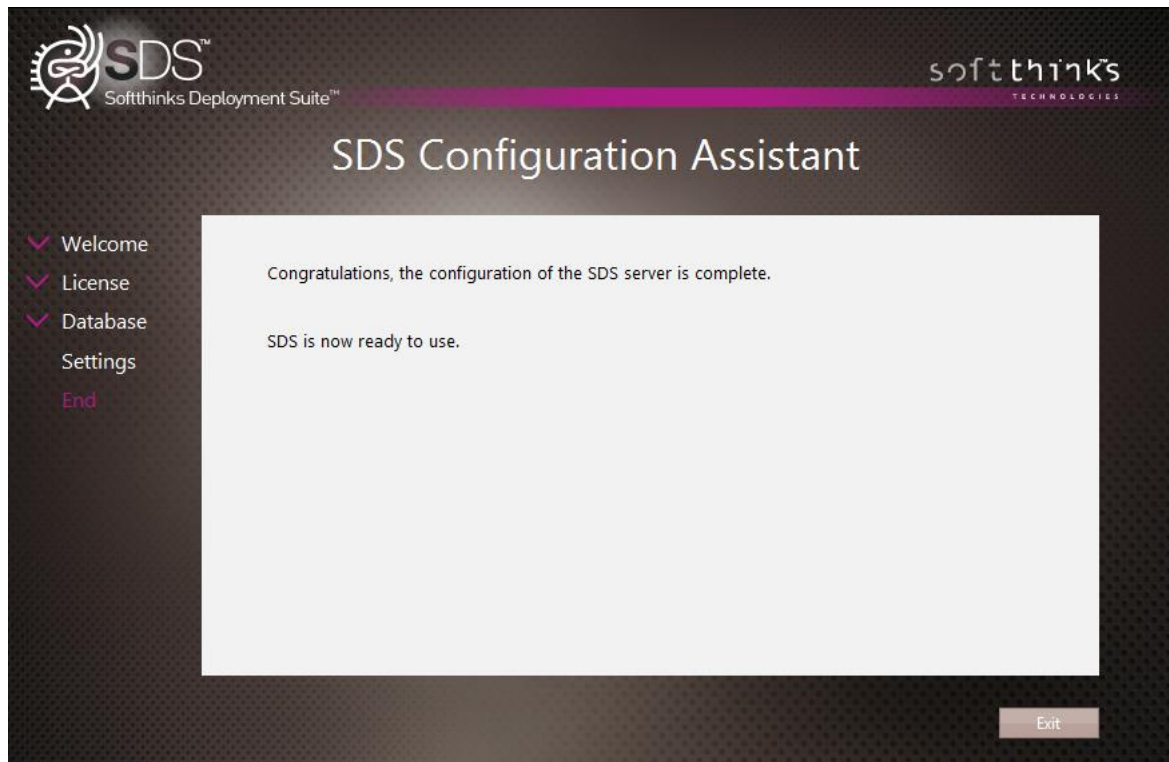
Click on Next



Input the key provided in the email you received after purchasing SDS4MAR online.







APPENDIX**Windows Server 2012 configuration for SDS****Hardware Requirements (examples):**

- 1 Server (HP Proliant MicroServer Gen8)
- 3 Hard Drives (WD Red 1 TB NAS Hard Drives)
- 1 8-port Gigabit Switch (Netgear ProSafe Plus, 8-port Gigabit (GS108E))
- Cat 5e Cables or better

Hardware Setup:

- Activate Raid in BIOS
- Disk 1 as its own array in Raid 0
- Disk 2 and 3 combined into a single logical drive in Raid 0
- Declare Disk 1 as bootable
- Load RAID Controller driver on a USB Flash Drive to make the drives discoverable
- Install Windows Server 2012 on Disk 1

Software Requirements:

- Windows Server 2012 or better
- Windows ADK 8.1
- SDS 14.0.0
- SDS Console 3.0.0.191

Setup and Configuration Checklist

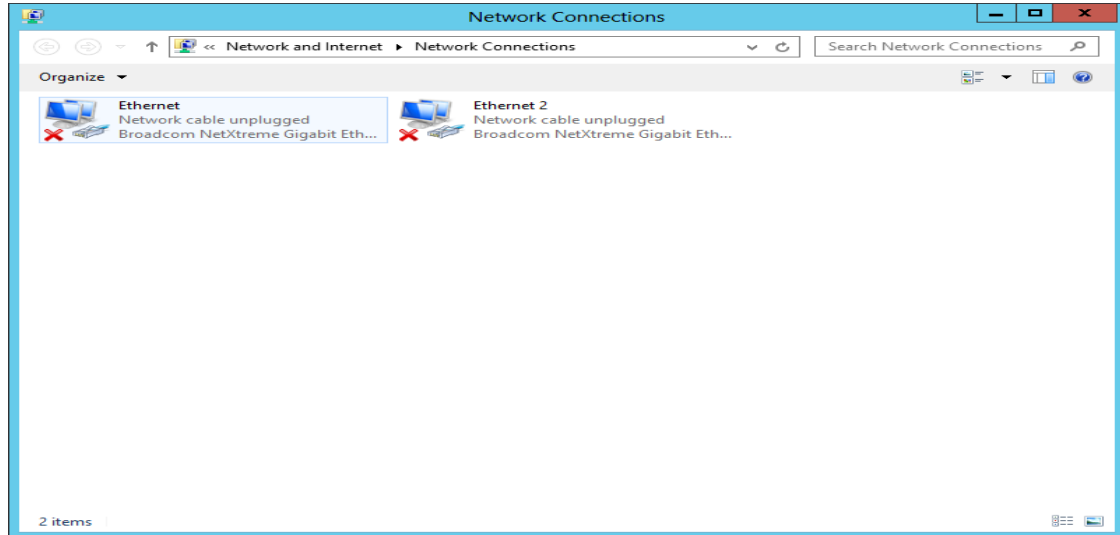
	Step	Complete
1.	Install Windows Server 2012	
2.	Configure Windows Server 2012	
2A.	Configure Network Card Settings	
2B.	Install/Configure Active Directory Service	
2C.	Add/Configure DHCP Service	
2D.	Format the Second Drive Array	
2E.	Add/Configure WDS	
2F.	Install Windows ADK	
3.	SDS and SDS Console Installation and Configuration	
3A.	SDS Installation	
3B.	SDS Console Installation	
3C.	Select the Database	
3D.	Activating the License	
3E.	Configure the Deployment Launcher	

Print this page and use it as a checklist as you complete the Setup and Configuration.

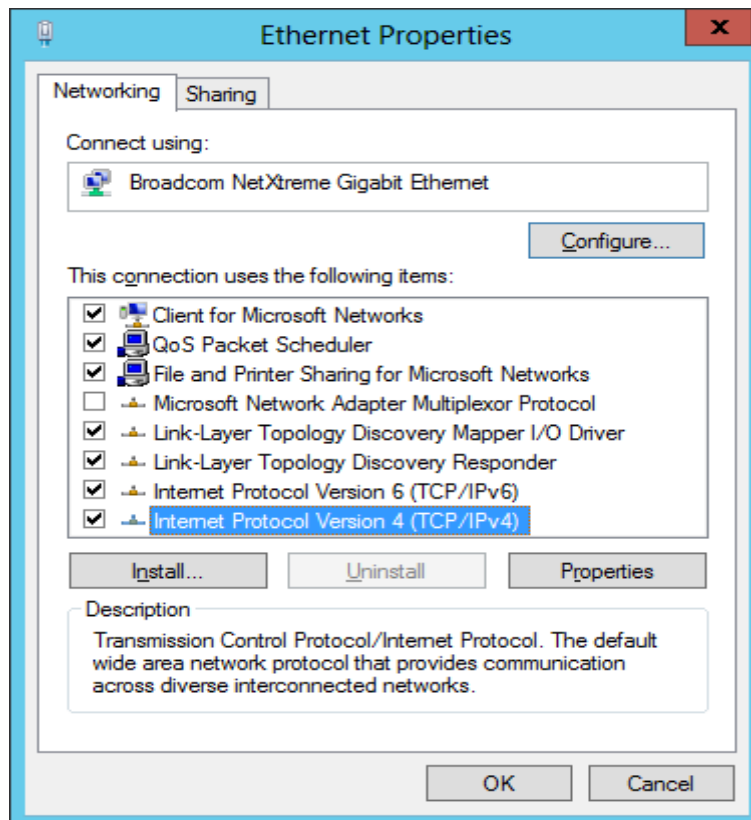
I. Windows 2012 Configuration for SDS:

A. Configure Network Card Settings

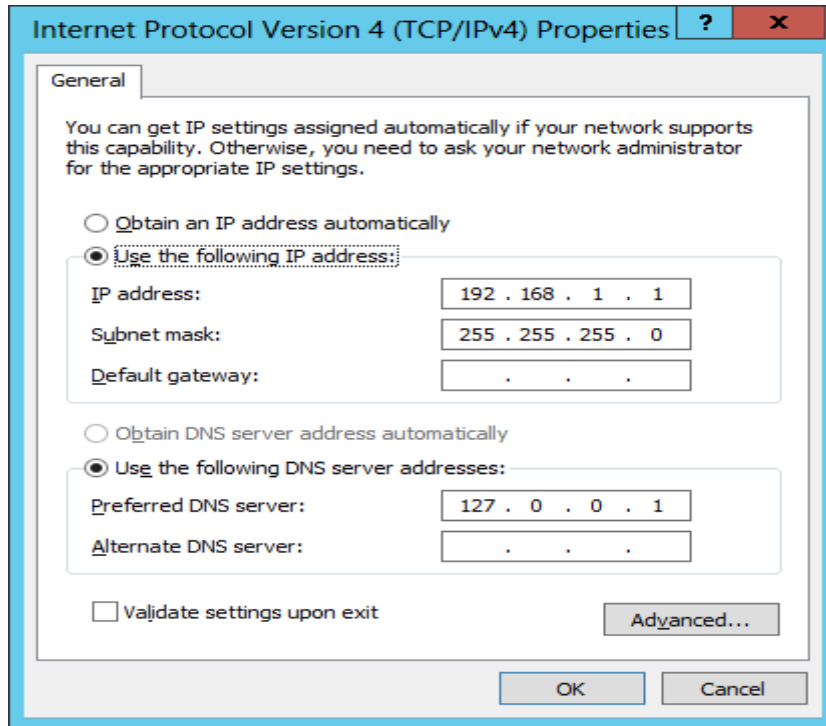
1. Go to Control Panel and select Network and Sharing Center.
2. Select Change Adapter Settings from the left-hand column.



3. Right click on the first adapter labeled Ethernet then select *Properties*.



4. Click on Internet Protocol Version 4 (TCP/IPv4) and then select Properties.



Internet Protocol Version 4 (TCP/IPv4) Properties ? x

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address: 192 . 168 . 1 . 1

Subnet mask: 255 . 255 . 255 . 0

Default gateway:

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server: 127 . 0 . 0 . 1

Alternate DNS server:

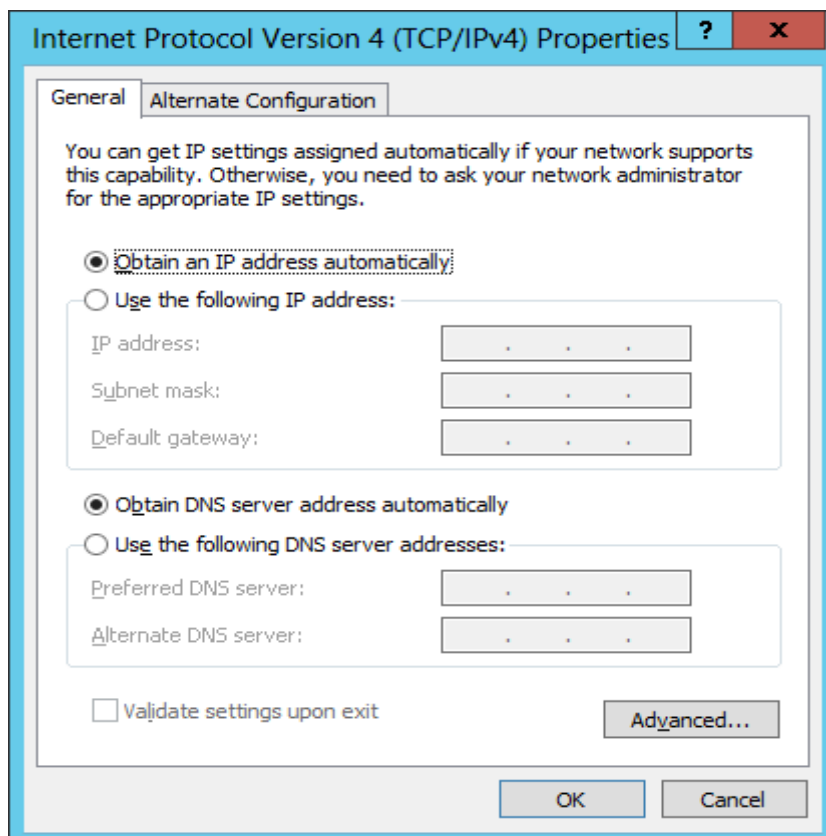
☐ Validate settings upon exit

Advanced...

OK Cancel

5. Input the settings shown above. Click Ok then close.

6. Right click on the second adapter labeled Ethernet 2 then select *Properties*.



Internet Protocol Version 4 (TCP/IPv4) Properties ? x

General **Alternate Configuration**

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☒ Obtain an IP address automatically:

☐ Use the following IP address:

IP address:

Subnet mask:

Default gateway:

☒ Obtain DNS server address automatically

☐ Use the following DNS server addresses:

Preferred DNS server:

Alternate DNS server:

☐ Validate settings upon exit

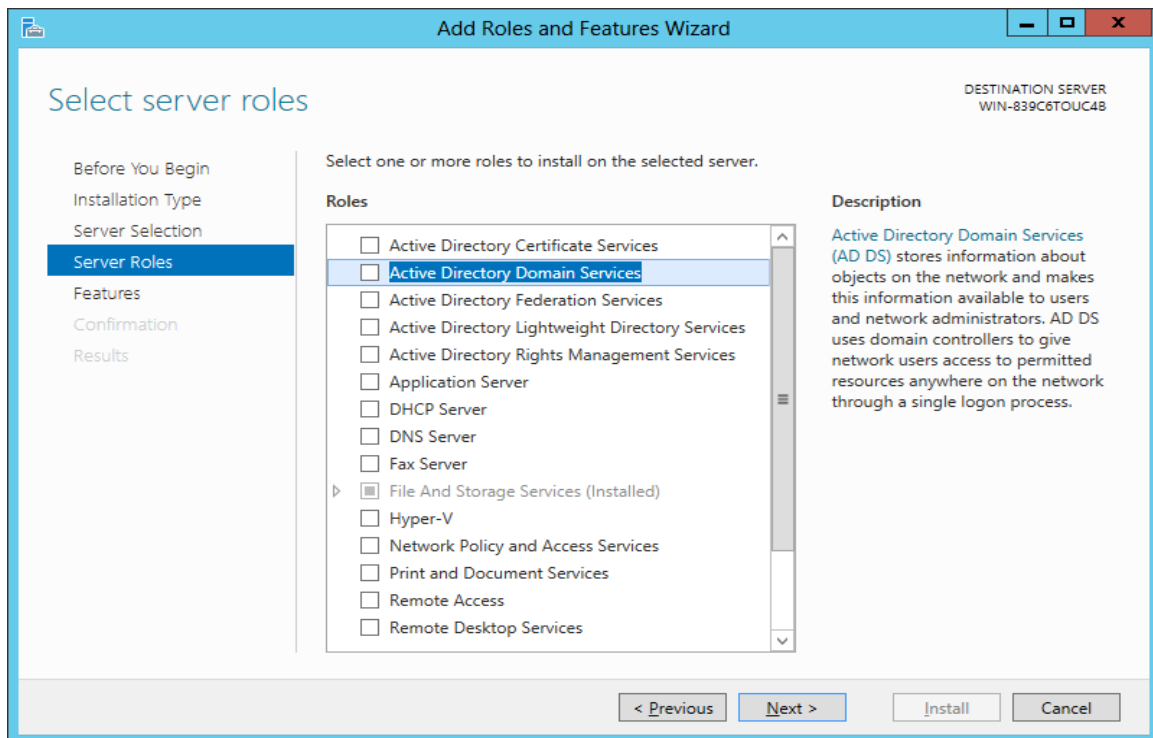
Advanced...

OK Cancel

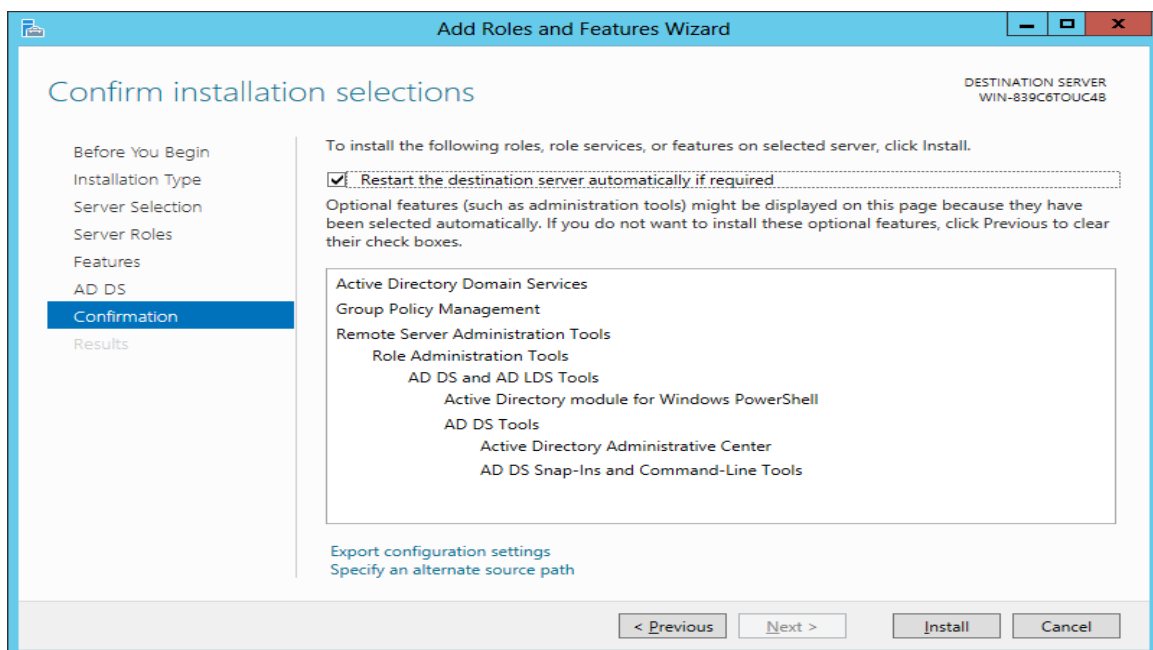
6. Verify that this card is set for DHCP with the settings above. Hit OK, then Close. Then close the Network and Sharing Center window.

B. Install/Configure Active Directory Service

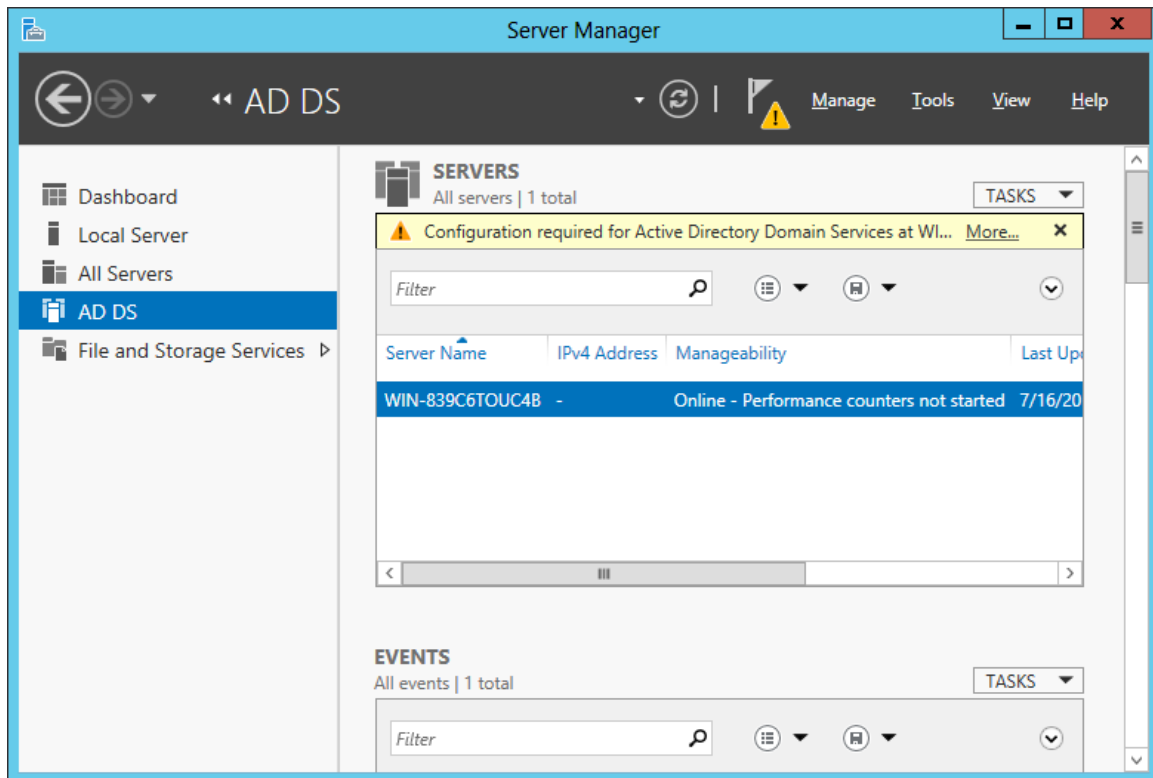
1. Open the Server Manager Dashboard and click Add Roles and Features then click Next, Next, and Next again.



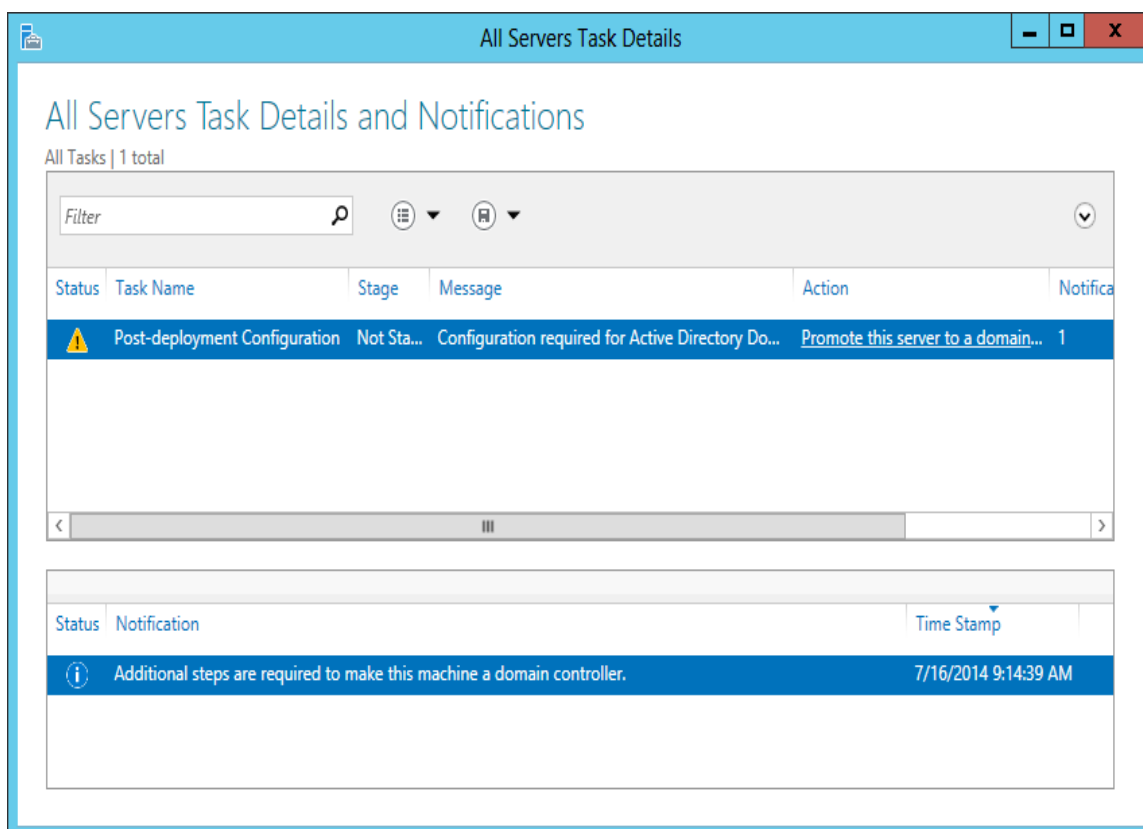
2. Select Active Directory Domain Services, then click Add Features. Click Next, Next, and Next again.



3. Put a Check in the box which says "Restart the Destination Server Automatically if required." Select Yes on the confirmation box then click Install on the main screen. Click close when it has completed installing.
4. In Roles and Server Groups on the Server Manager Dashboard Click on the AD/DS box.



5. Click *More* on the yellow warning bar at the top.



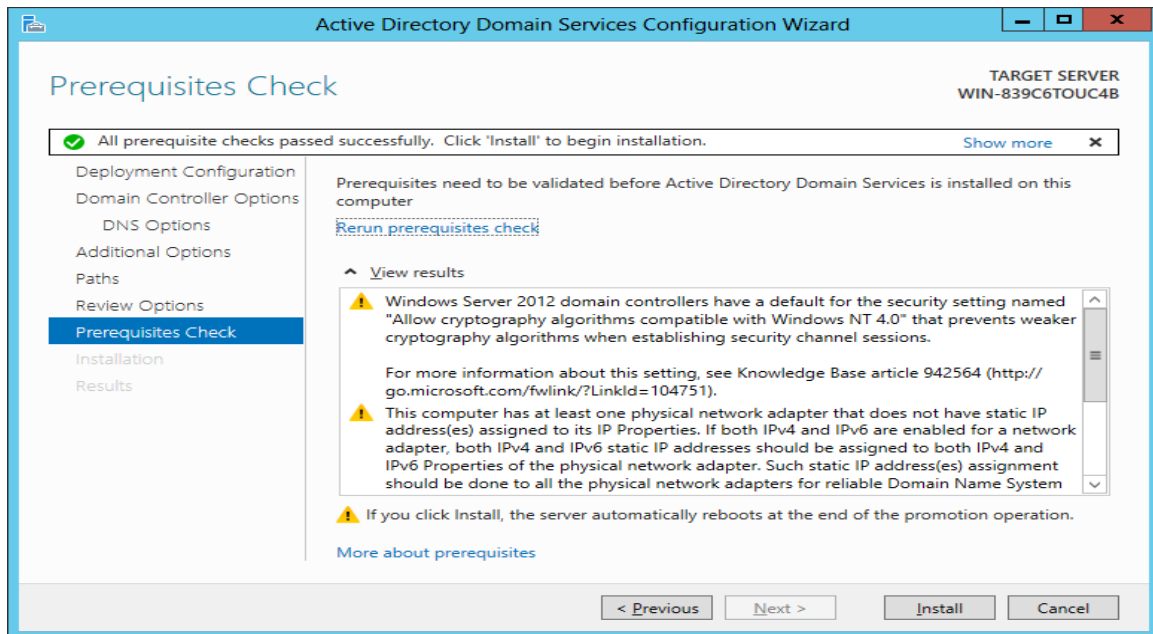
6. On the top bar select *Promote this server to a domain...*(controller).

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes standard Windows window controls. The main window has a blue header with the title 'Active Directory Domain Services Configuration Wizard'. On the left is a navigation pane with the following items: 'Deployment Configuration' (highlighted in blue), 'Domain Controller Options', 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Deployment Configuration' and contains the following text: 'Select the deployment operation'. Below this are three radio buttons: 'Add a domain controller to an existing domain', 'Add a new domain to an existing forest', and 'Add a new forest' (which is selected). Below the radio buttons is the text 'Specify the domain information for this operation'. Underneath is a label 'Root domain name:' followed by a text box containing 'SDS.com'. At the bottom right of the main content area is a link 'More about deployment configurations'. At the bottom of the window are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

7. Click Add a new forest and put SDS.com in the Root domain name box. Click Next.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window, now on the 'Domain Controller Options' step. The navigation pane on the left has 'Domain Controller Options' highlighted in blue. The main content area is titled 'Domain Controller Options' and contains the following text: 'Select functional level of the new forest and root domain'. Below this are two dropdown menus: 'Forest functional level:' and 'Domain functional level:', both set to 'Windows Server 2012'. Below the dropdown menus is the text 'Specify domain controller capabilities'. Underneath are three checkboxes: 'Domain Name System (DNS) server' (checked), 'Global Catalog (GC)' (checked), and 'Read only domain controller (RODC)' (unchecked). Below the checkboxes is the text 'Type the Directory Services Restore Mode (DSRM) password'. Underneath are two password fields: 'Password:' and 'Confirm password:', both containing masked characters (dots). At the bottom right of the main content area is a link 'More about domain controller options'. At the bottom of the window are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

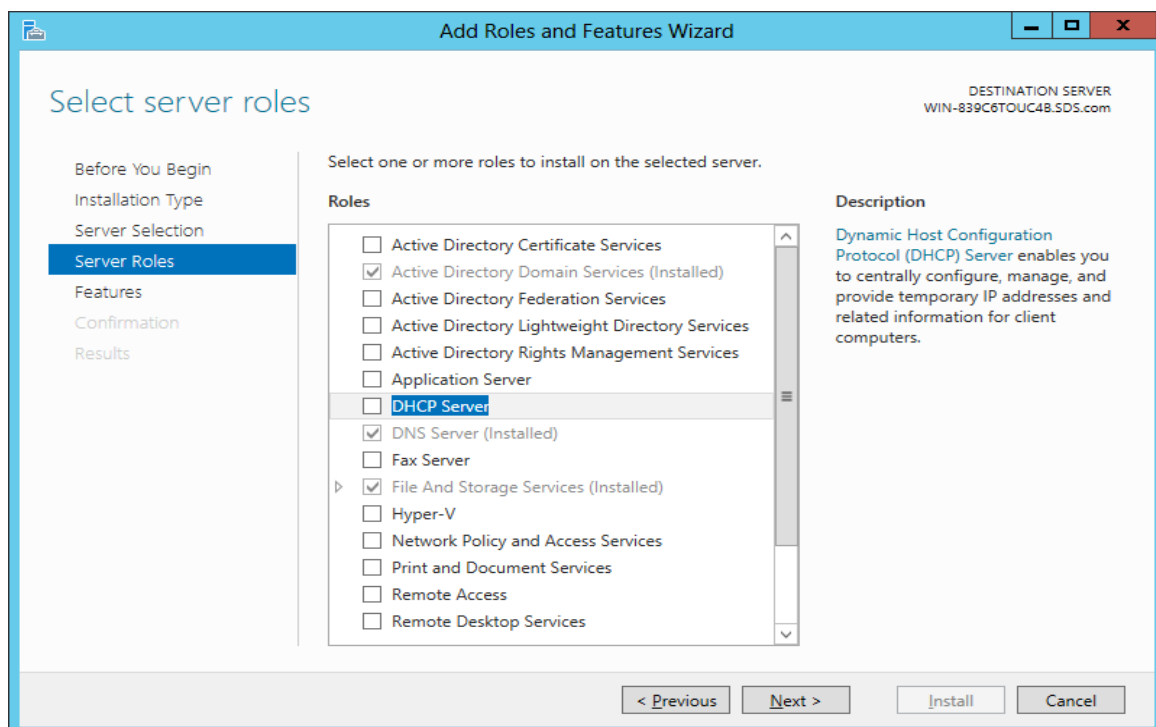
8. Type in the password Softthinks1 and then confirm it. Click Next, Next, Next, Next, and Next again.



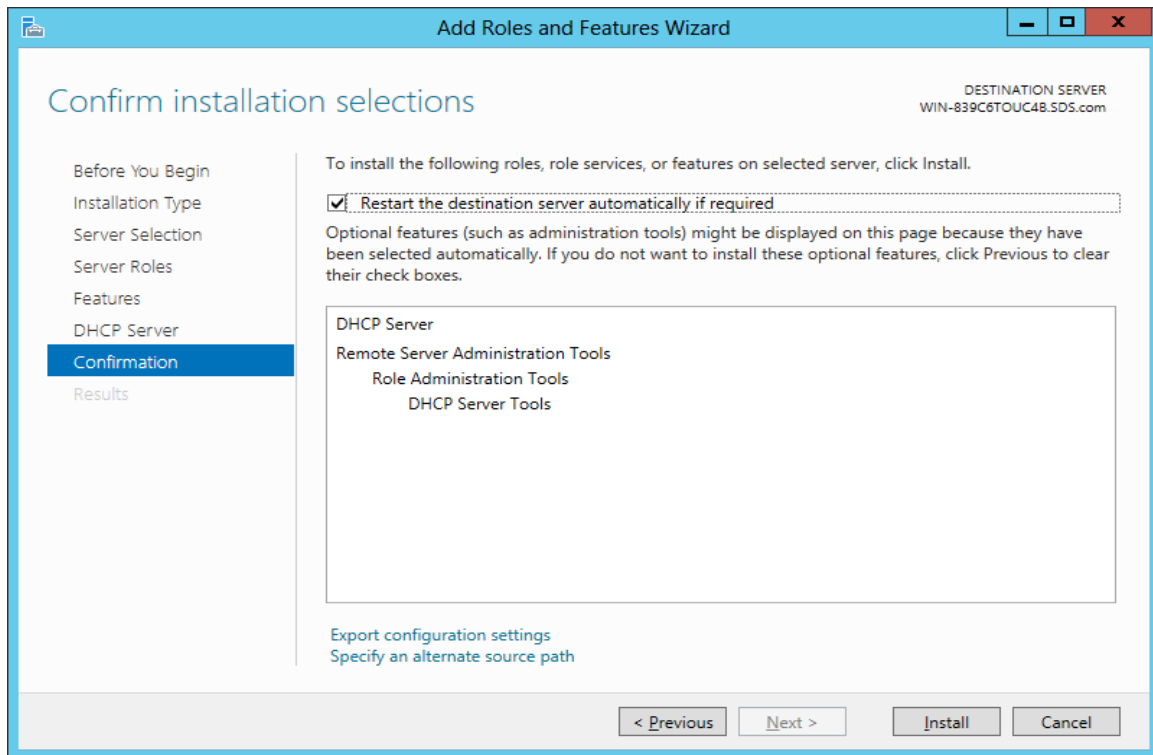
9. If all Prerequisite checks passed successfully then click Install. Note: You must have the NIC plugged into a switch or the TCP/IP check will fail.

C. Add/Configure DHCP Service

1. Open the Server Manager Dashboard and click Add Roles and Features then click Next, Next, and Next again.

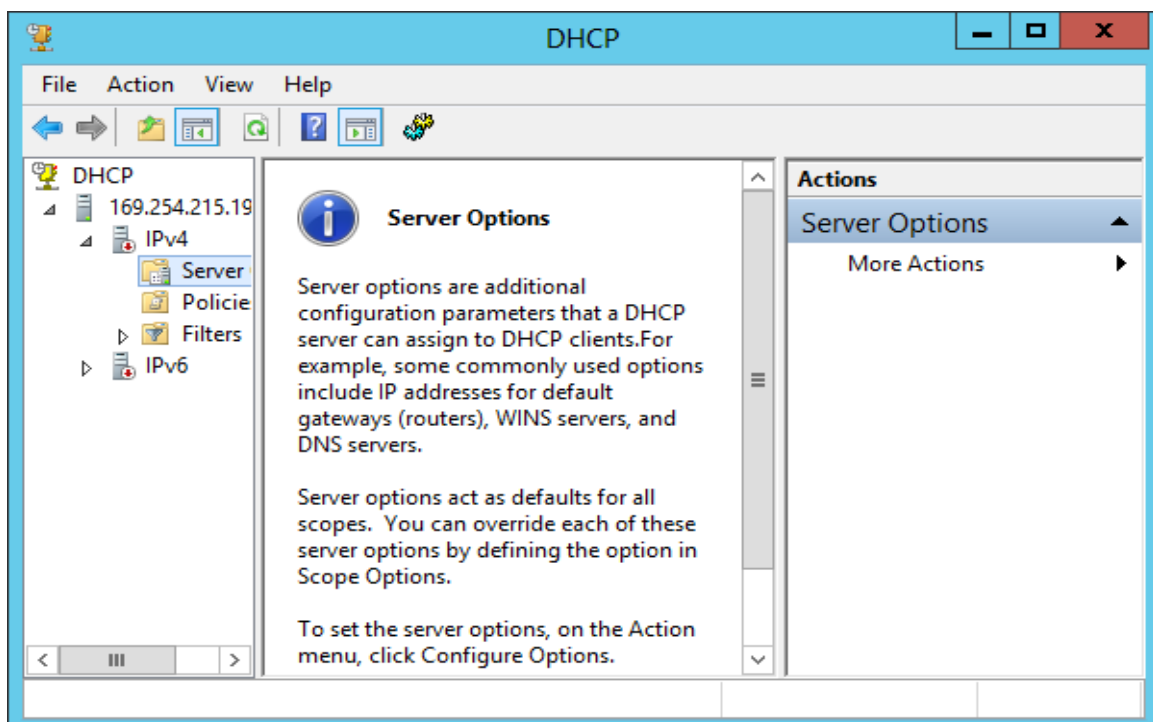


2. Select DHCP Server then click Next, Add Features, Next, Next, and Next Again.

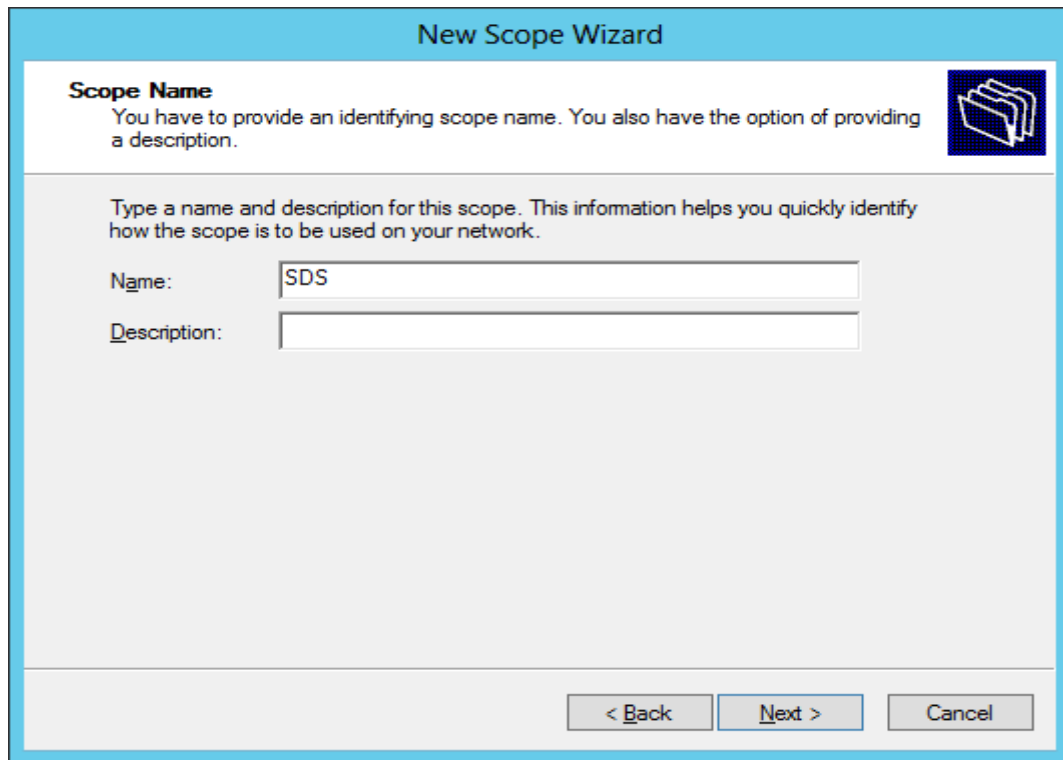


3. Put a Check in the box which says "Restart the Destination Server Automatically if required." Select Yes on the confirmation box then click Install on the main screen. Click close when it has completed installing.

4. From the Server Manager Dashboard Select Tools then *DHCP*.



5. Expand out the arrows for 169.254.xxx.xxx and then for IPv4. Right click on IPv4 and select *New Scope*. Click Next.



New Scope Wizard

Scope Name
You have to provide an identifying scope name. You also have the option of providing a description.

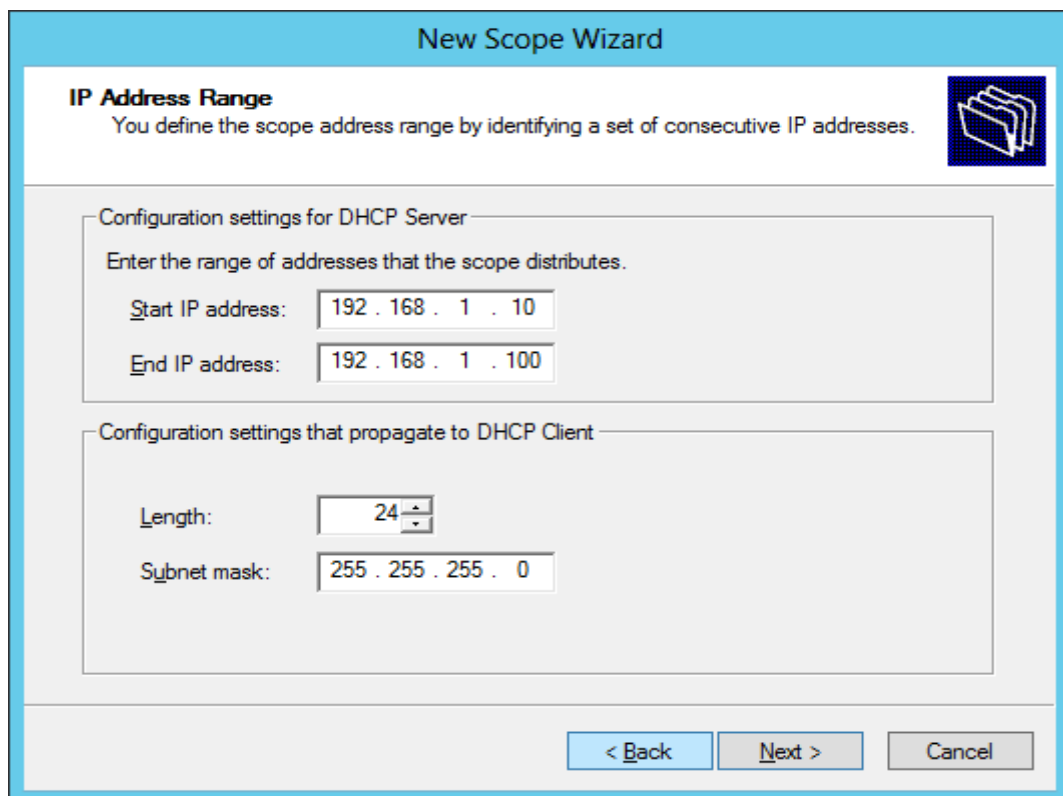
Type a name and description for this scope. This information helps you quickly identify how the scope is to be used on your network.

Name:

Description:

< Back Next > Cancel

6. Type SDS in as the Name and click Next.



New Scope Wizard

IP Address Range
You define the scope address range by identifying a set of consecutive IP addresses.

Configuration settings for DHCP Server

Enter the range of addresses that the scope distributes.

Start IP address:

End IP address:

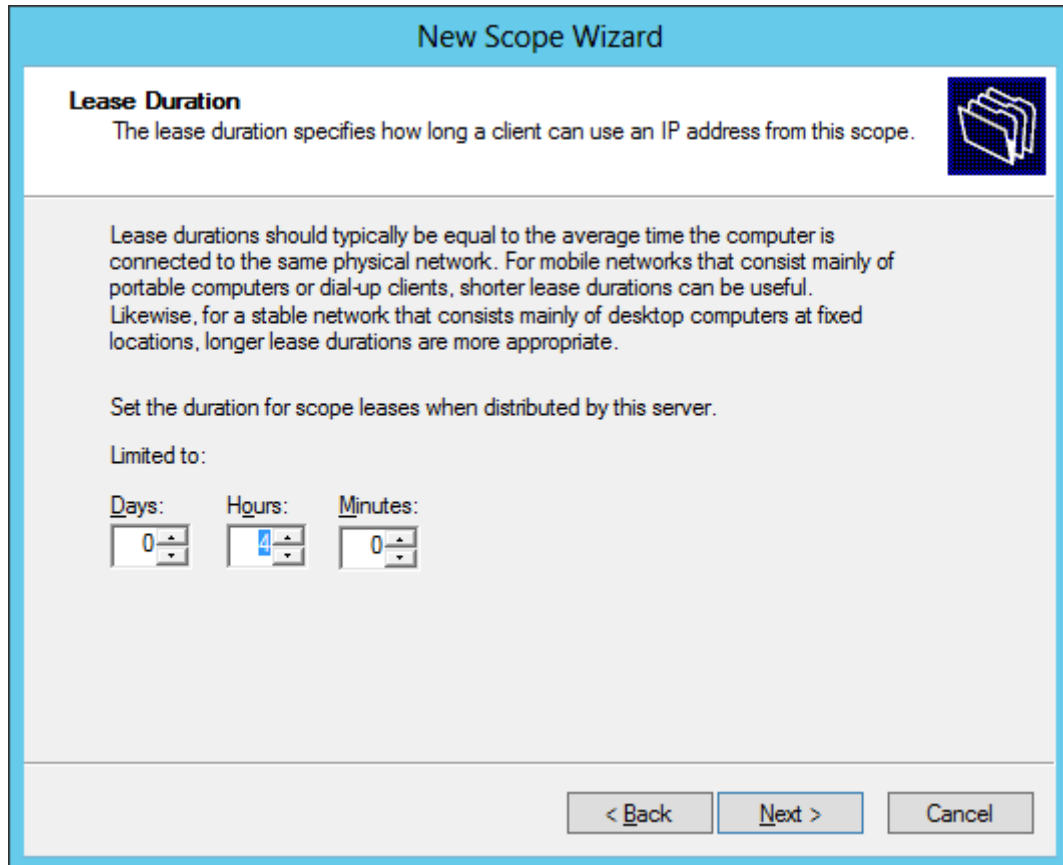
Configuration settings that propagate to DHCP Client

Length:

Subnet mask:

< Back Next > Cancel

7. Type in Start IP address 192.168.1.10 and in End IP address 192.168.1.100. Click Next and Next Again.



New Scope Wizard

Lease Duration
The lease duration specifies how long a client can use an IP address from this scope.

Lease durations should typically be equal to the average time the computer is connected to the same physical network. For mobile networks that consist mainly of portable computers or dial-up clients, shorter lease durations can be useful. Likewise, for a stable network that consists mainly of desktop computers at fixed locations, longer lease durations are more appropriate.

Set the duration for scope leases when distributed by this server.

Limited to:

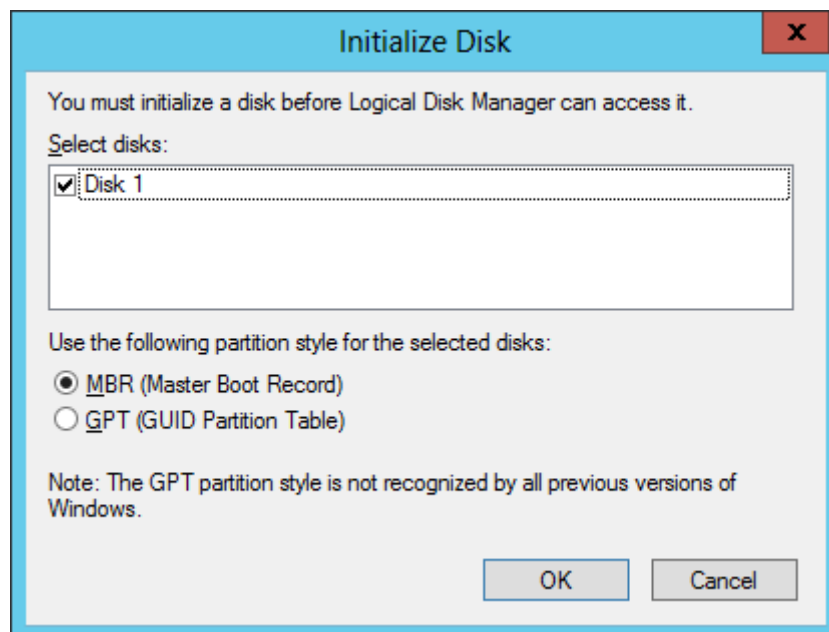
Days: 0 Hours: 4 Minutes: 0

< Back Next > Cancel

- Set the Lease Duration to 4 hours and click Next, Next, Next, Next, Next, Next, and then Finish. Close out of the DHCP Window.

D. Format the Second Drive Array

- Right click the Start Menu in the lower left hand of the screen and select Disk Management.



Initialize Disk

You must initialize a disk before Logical Disk Manager can access it.

Select disks:

☒ Disk 1

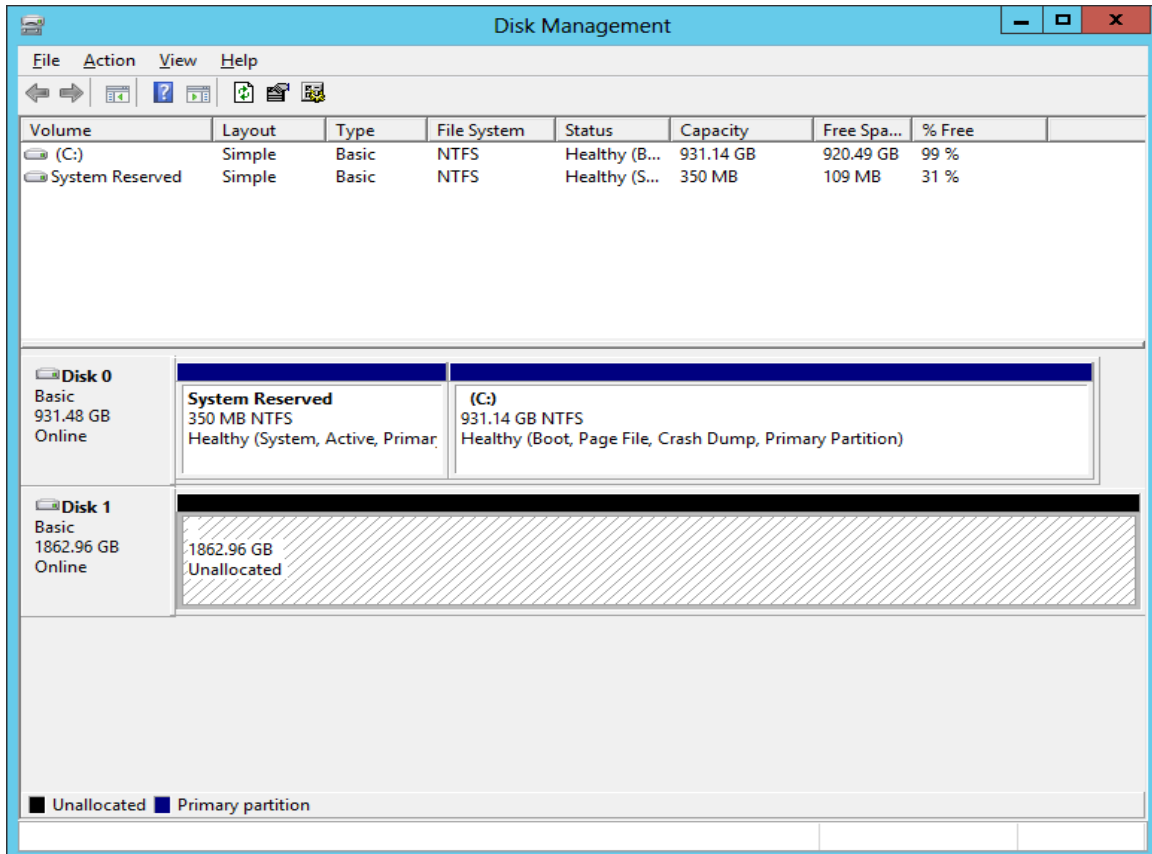
Use the following partition style for the selected disks:

☒ MBR (Master Boot Record)
☐ GPT (GUID Partition Table)

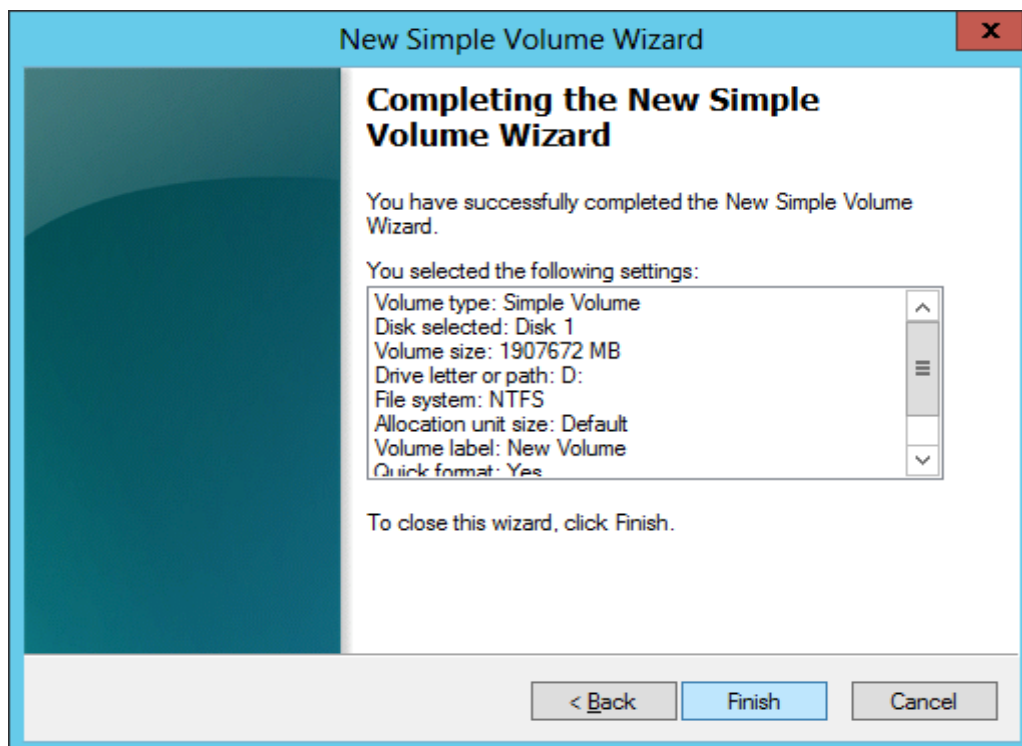
Note: The GPT partition style is not recognized by all previous versions of Windows.

OK Cancel

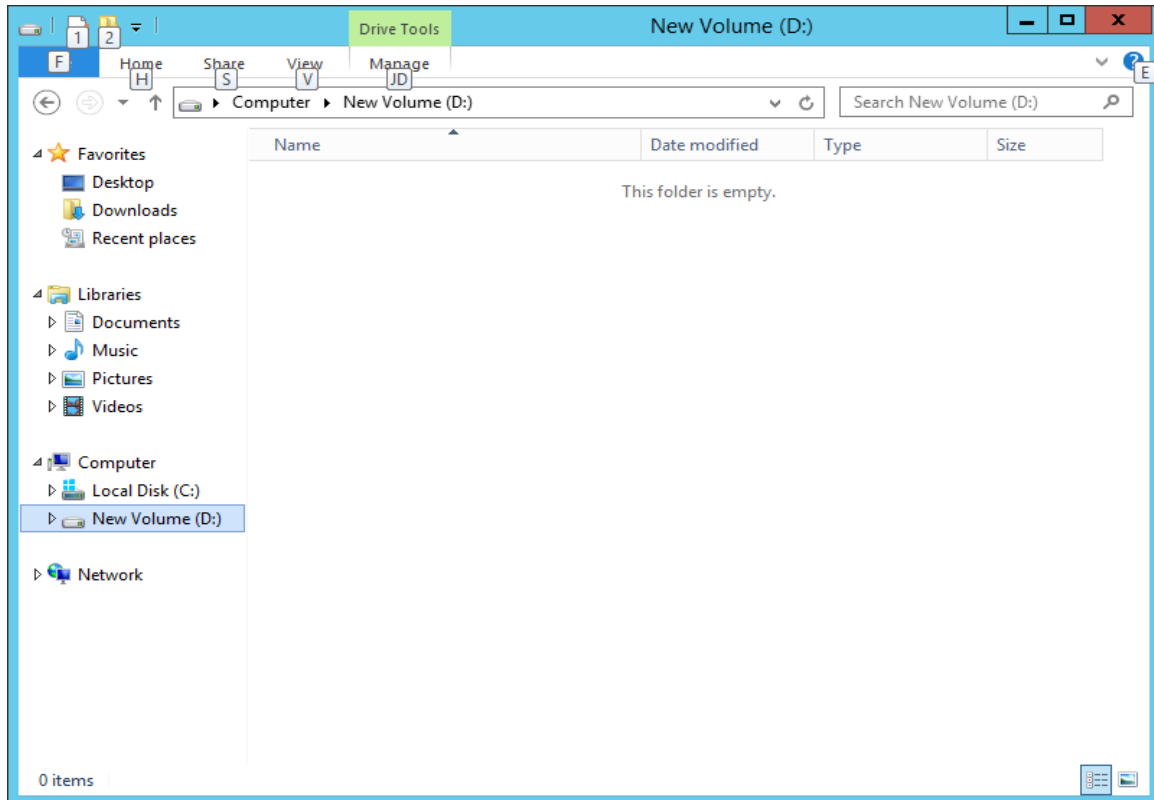
- Click *OK* on this screen.



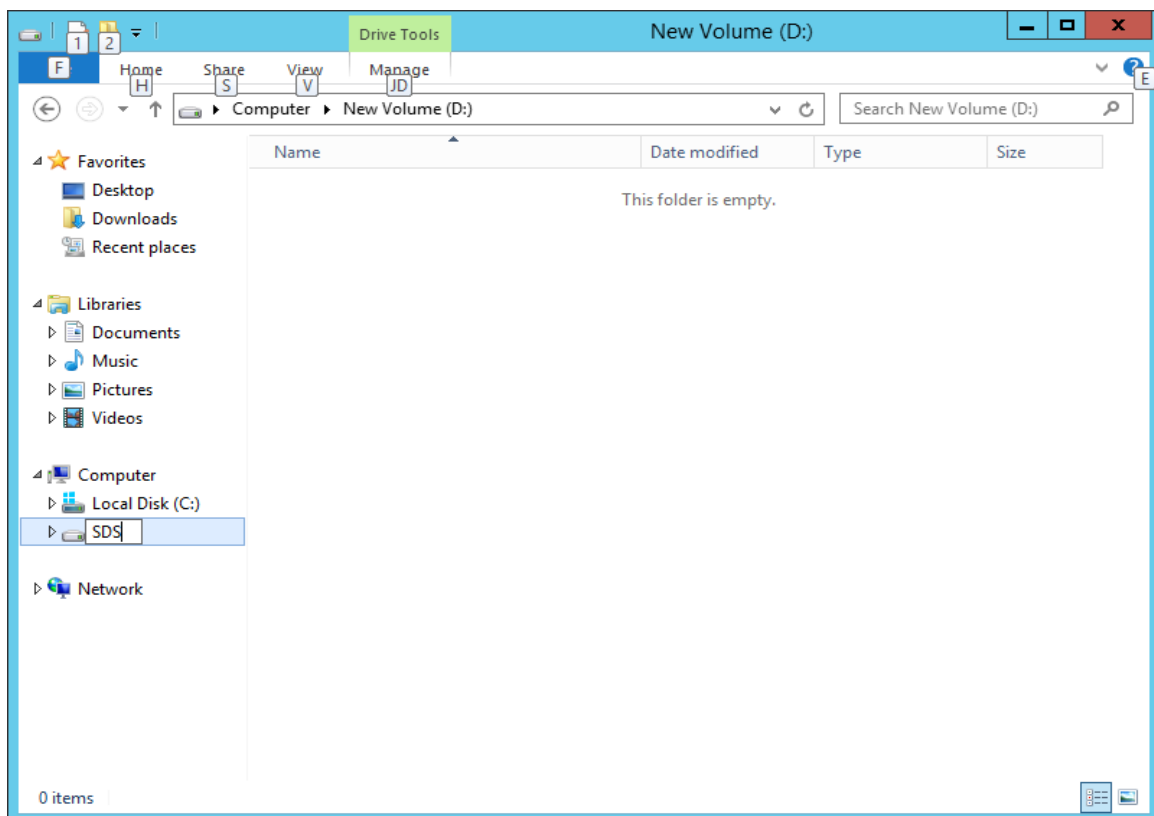
3. Right click on the Disk 1 Unallocated Space and select *New Simple Volume*. Click Next, Next, Next, Next, and then Finish.



4. When it is finished formatting close out of the Disk Management Window.



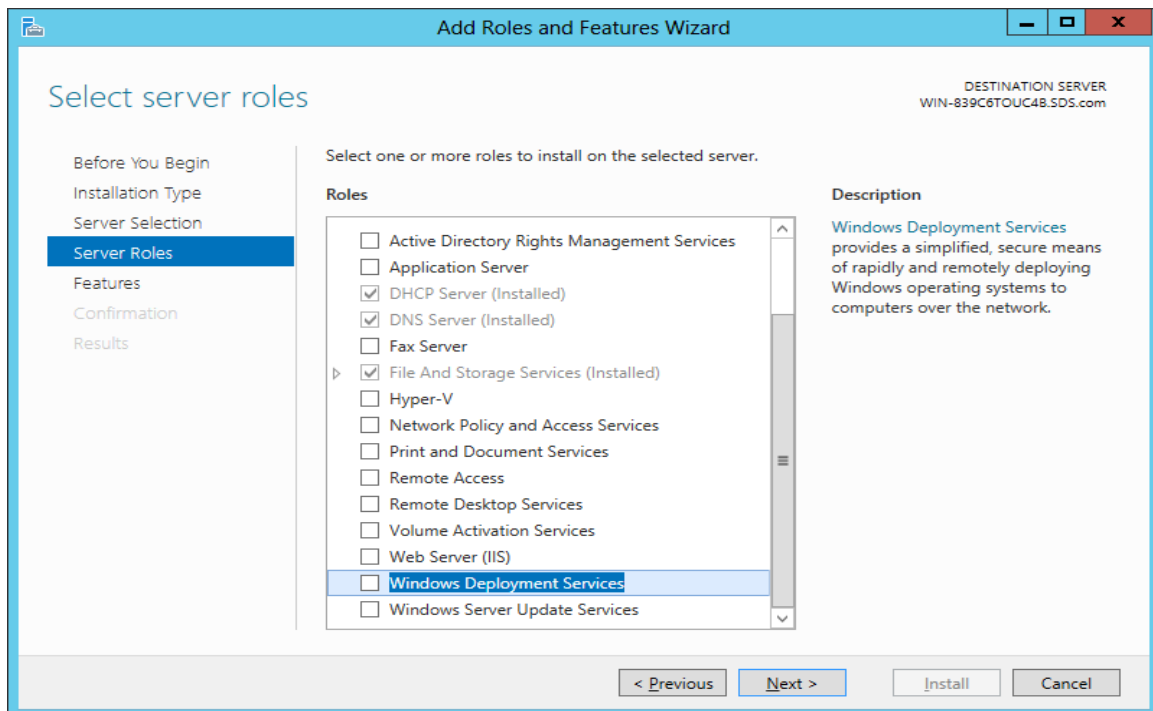
5. Open up Libraries and right click on the D: drive labeled New Volume and then select Rename.



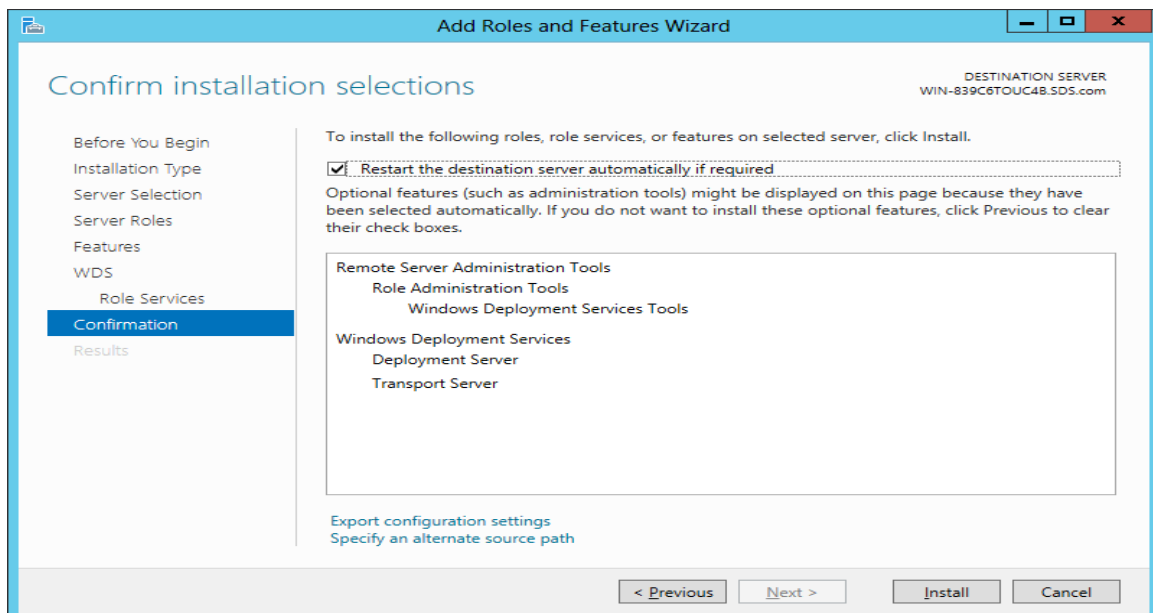
7. Change the name to SDS and hit enter. Close the Libraries Window.

E. Add/Configure WDS

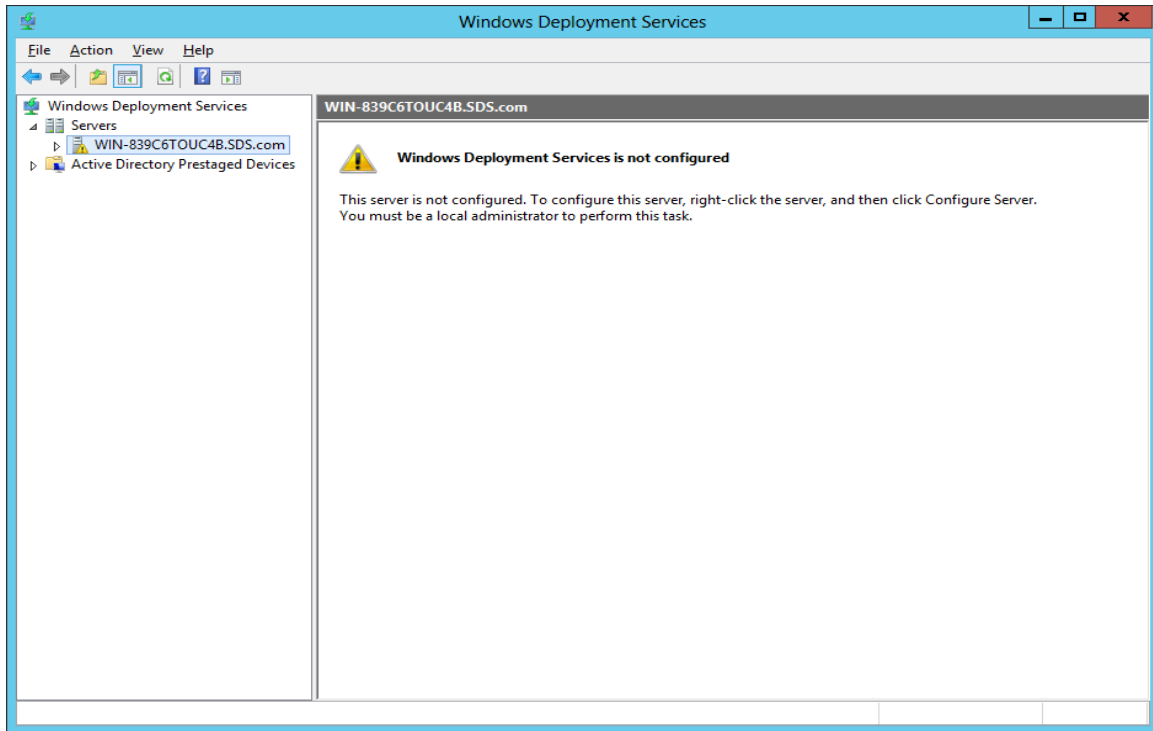
1. Open the Server Manager Dashboard and click Add Roles and Features then click Next, Next, and Next again.



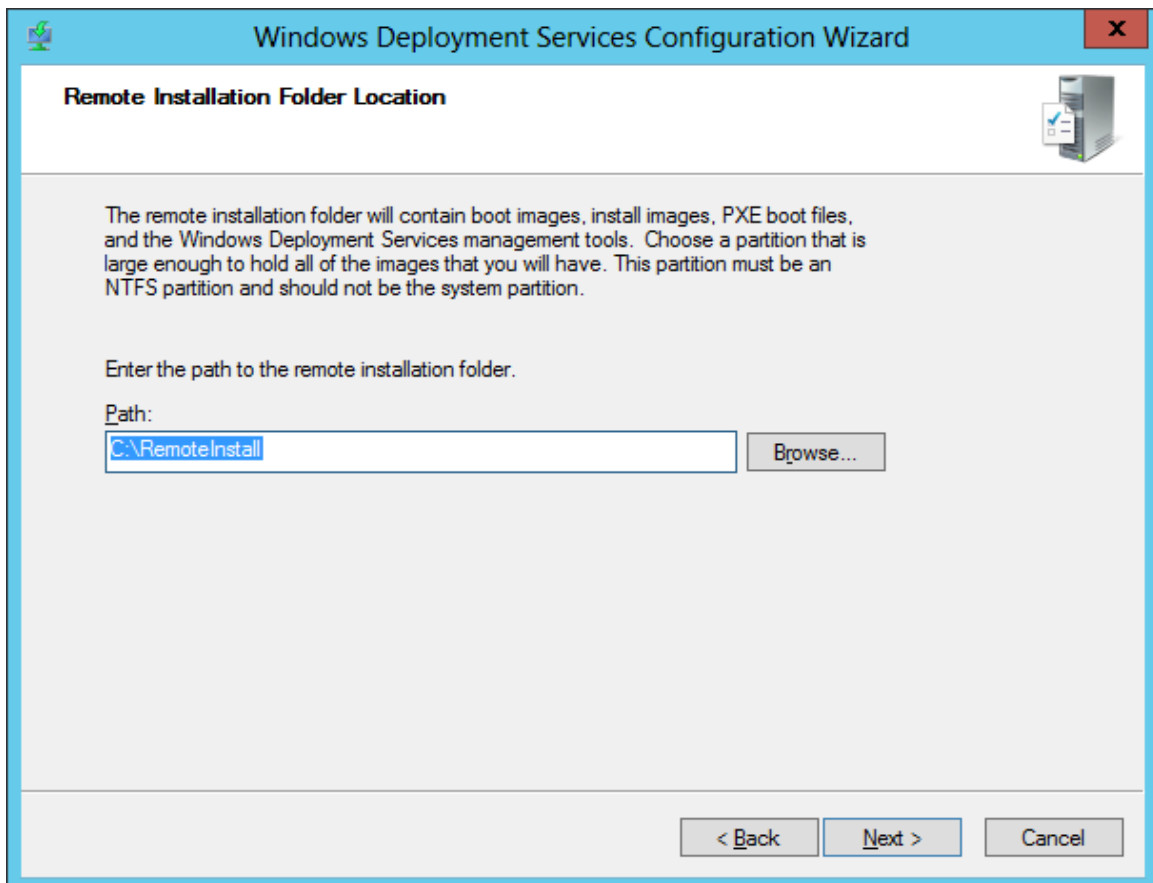
2. Select Windows Deployment Services and then click Add Features, Next, Next, Next, and Next again.



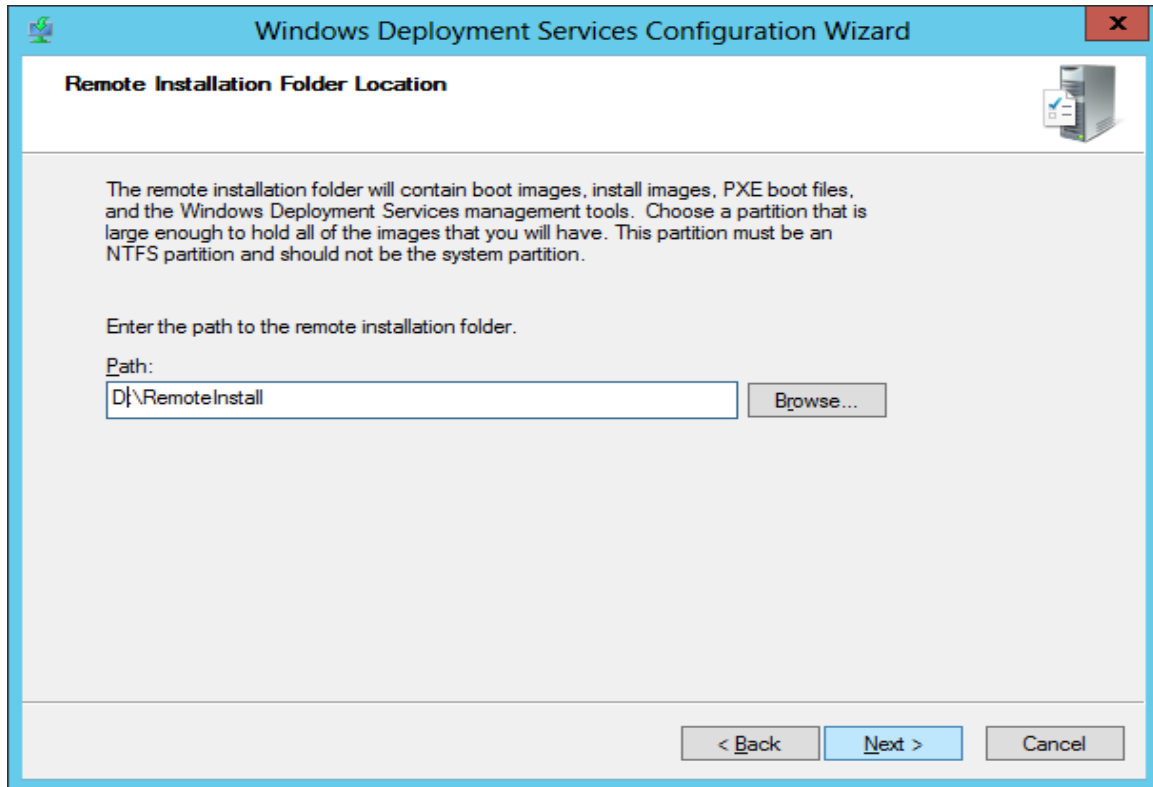
3. Put a Check in the box which says "Restart the Destination Server Automatically if required." Select Yes on the confirmation box then click Install on the main screen. Click close when it has completed installing.
4. From the Server Manager Dashboard Select Tools then *Windows Deployment Services*.



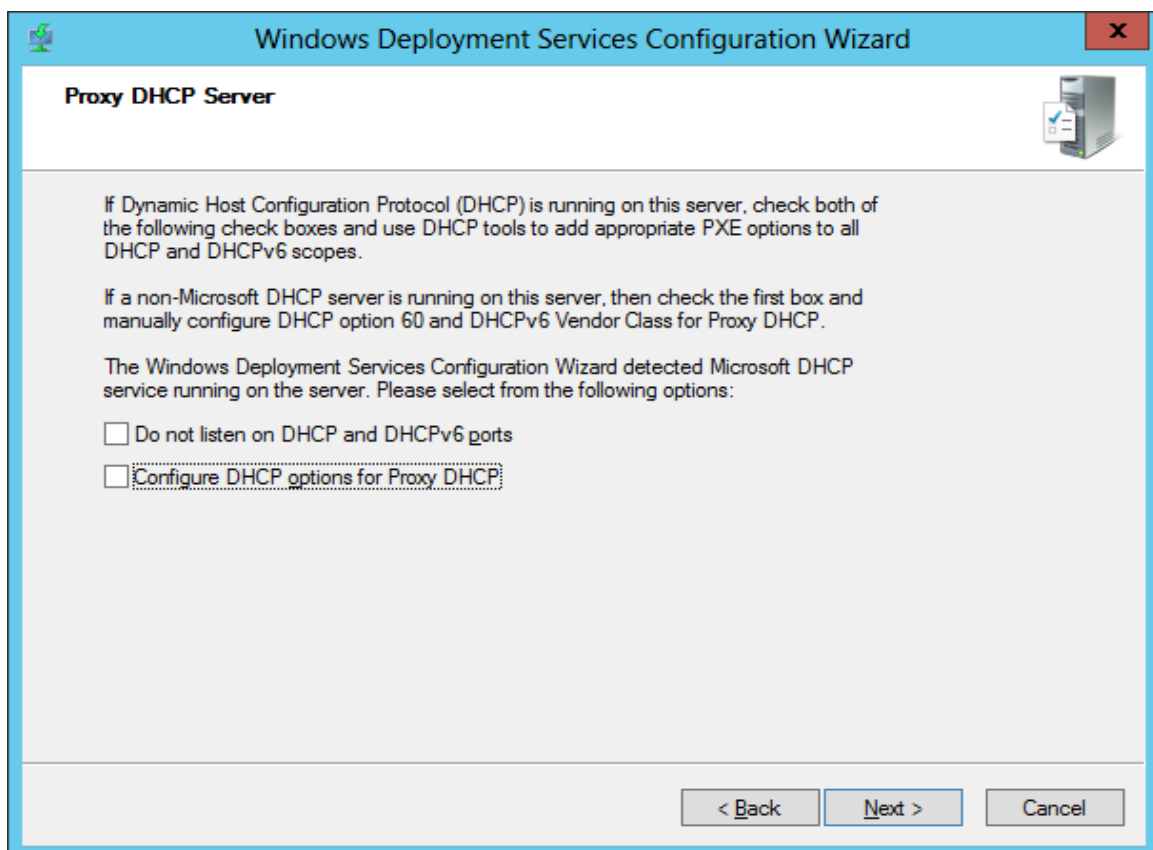
5. Expand the arrow by Servers, right click on the server listed and then select *Configure Server*. Click Next then Next again.



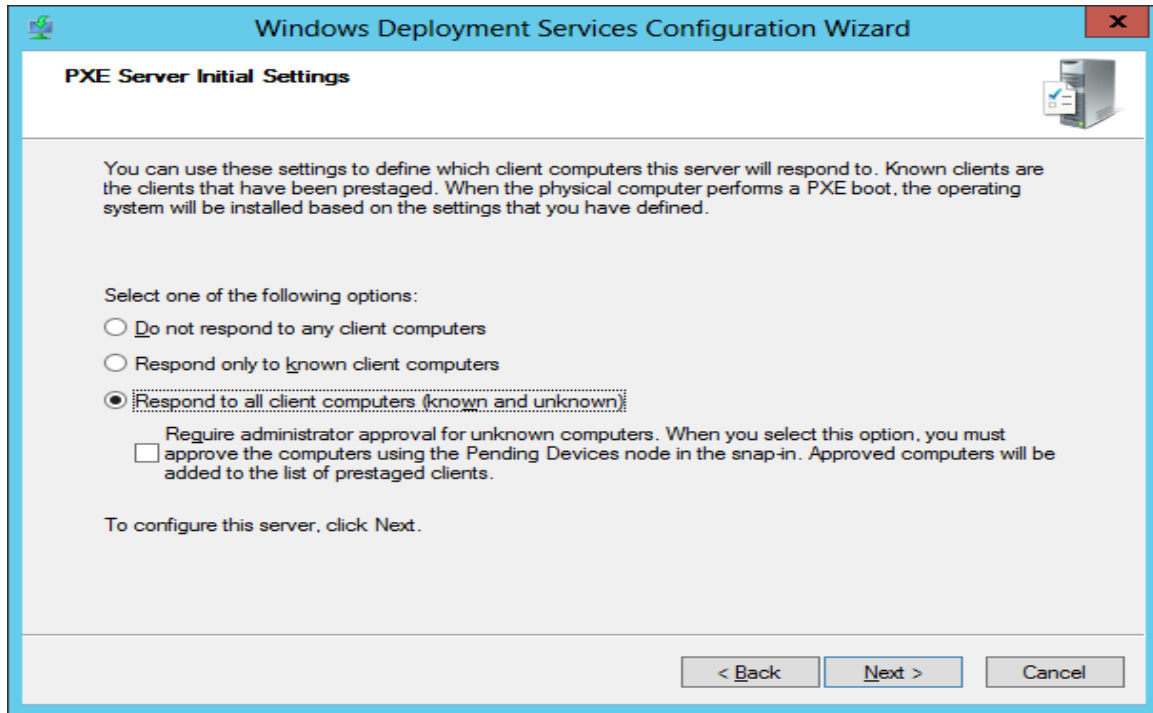
6. In the Path box change the C:\RemoteInstall to D:\Remote Install.



7. Click Next



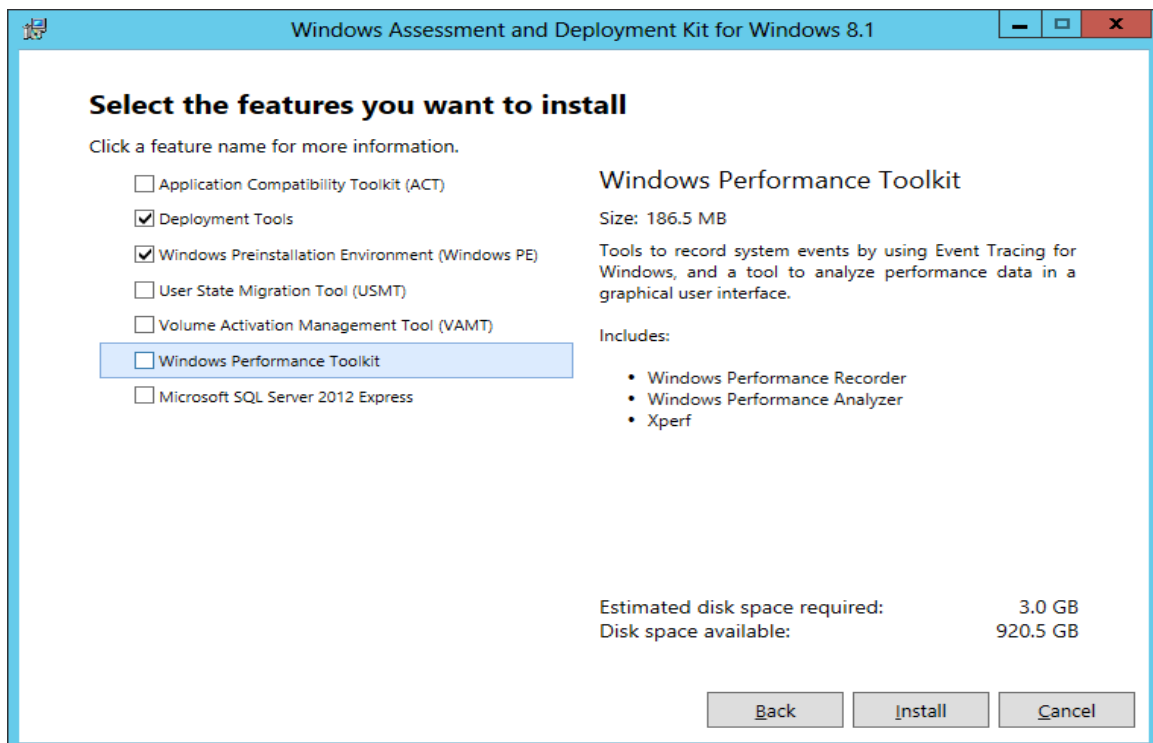
8. Remove the checks from the 2 boxes and click Next.



9. Select Respond to all client computers (known and unknown) and click Next. Close out of the Windows Deployment Services Window when it completes.

F. Install Windows ADK

1. Install the Windows ADK software from your source folder. Click Next, Next, and Accept for the License.



2. Deselect Windows Performance Toolkit and select Install.